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HEALTH AND SOCIAL SERVICE MANPOWER IN ALBERTA, 1987

Alberta
HEALTH AND SOCIAL SERVICES
DISCIPLINES COMMITTEE

9th Floor, John E. Brownlee Building
10365 - 97 Street
EDMONTON, Alberta T5J 3W7

Foreword

The Alberta Health and Social Services Disciplines Committee is an interdepartmental body of senior officials representing five government departments: Advanced Education; Career Development and Employment; Community and Occupational Health; Hospitals and Medical Care; and Social Services as well as the Professions and Occupations Bureau. The primary function of the Committee is to advise the provincial government on issues relating to health and social service manpower and training. To carry out this mandate, the Committee collects information and data through surveys and monitors manpower supply and demand through ongoing research activities.

The Committee recognizes the need to promote awareness of health and social service manpower concerns. With this in mind, the manpower information it collects is made available and accessible to a number of institutions, organizations and the general public. *Health and Social Service Manpower in Alberta*, an annual publication, provides a range of information on almost forty health and social service occupations in Alberta. The Committee is confident this publication continues to serve as a useful reference.

On behalf of the Alberta Health and Social Services Disciplines Committee, I wish to thank the staff of the professional associations, licensing boards, post-secondary institutions, and employing agencies for providing valuable data to us. Through their support and cooperation we are able to publish *Health and Social Service Manpower in Alberta, 1987*.

Elvin Christenson, F.C.A.
Chairman, Alberta Health and Social
Services Disciplines Committee

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Introduction

This is the tenth annual publication on health and social service manpower in Alberta. The Alberta Health and Social Services Disciplines Committee produces this report for the purpose of making manpower information available to the public. The report contains information and statistical data on 37 human service occupations for the year ending December 31, 1987. Included are:

- functional definitions;
- information on professional associations/licensing bodies;
- legislation;
- educational programs, enrolments and graduates;
- data on practitioners by geographical location;
- historical and comparative manpower figures.

Scope of Coverage

These are the thirty-seven human service occupations included in this report:

> audiologists/speech pathologists, biomedical engineers, child care workers, chiropractors, combined laboratory and x-ray technicians, community health representatives, dental assistants, dental hygienists, dental technicians, dentists, denturists, dietary technicians, dietitians/nutritionists, emergency medical technicians, health record administrators, health record technicians, medical laboratory technologists, medical radiation technologists, occupational hygiene technologists, occupational therapists, ophthalmic dispensers, optometrists, pharmacists, pharmacy assistants, physicians, physical therapists, podiatrists, prosthetists and orthotists, psychiatric nurses, psychologists, public health inspectors, recreational therapists, registered nurses, registered nursing assistants, rehabilitation practitioners, respiratory therapists, social workers.

The health care and social service sector contains numerous occupations; however, due to the constraint of time and other resources, it is not possible for all occupations to be reported in this publication. Two criteria have been used in the decision to include an occupation: legislative recognition and the existence of training programs. Only occupations with professional legislation and/or formal training programs in Alberta (or inter-provincial training agreements) are included.

Introduction

As in previous reports, data on personnel is presented by geographic distribution. Census divisions are used for this purpose. As of 1986, the number of census divisions increased from 15 to 19. As a result, comparison of census division data between 1986 and preceding years is not possible. In conjunction with this change, the boundaries of the Census Metropolitan Areas of Calgary and Edmonton increased to include a number of surrounding areas[1]. Manpower information for the two Census Metropolitan Areas is presented separately from their respective census divisions in order to provide a clearer picture of the urban and non-urban distribution of personnel. The map on the following page shows the census divisions and the major urban centres within each division.

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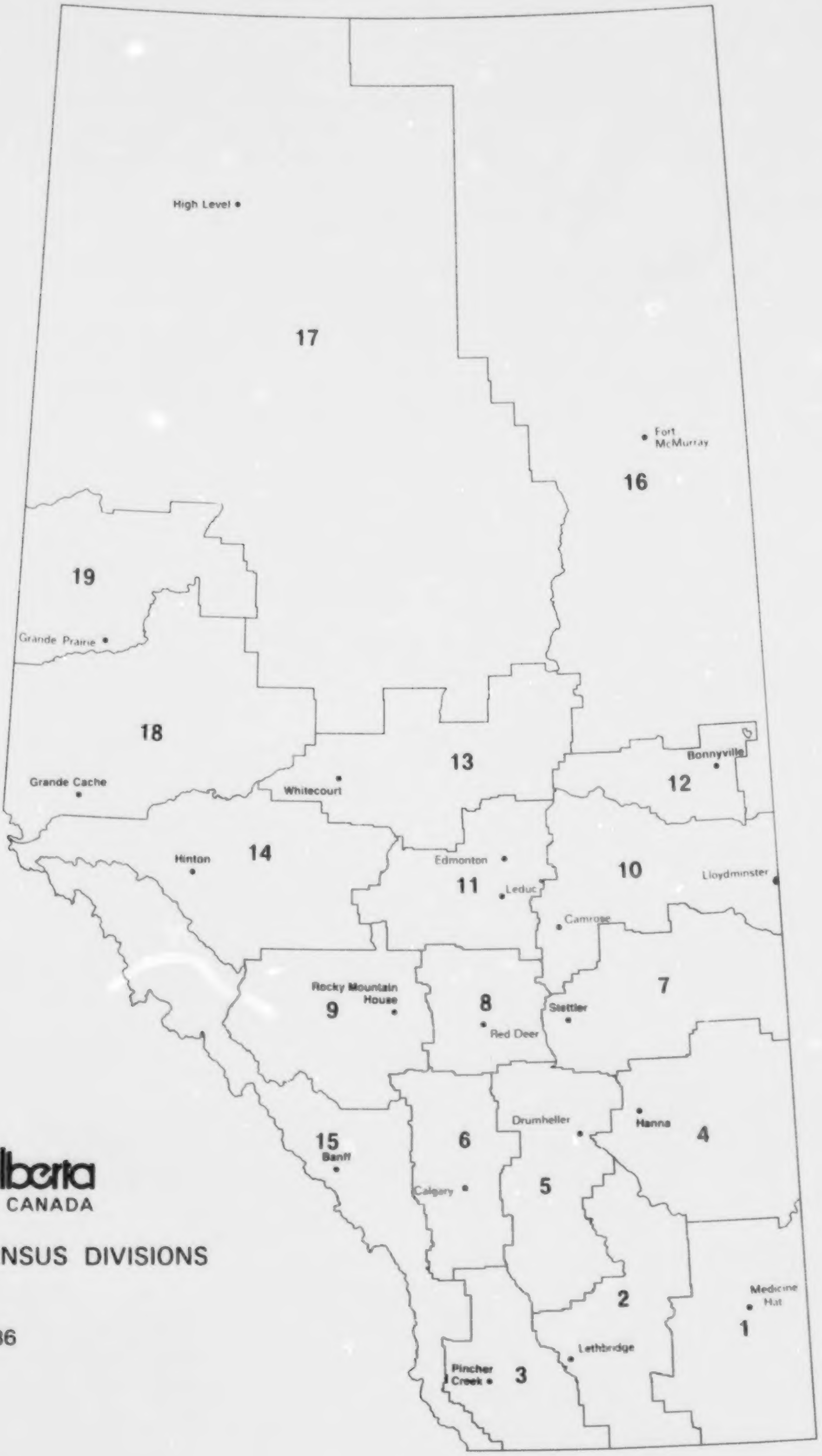
[1] [The Census Metropolitan Area of Edmonton includes the cities of Edmonton, Fort Saskatchewan, Leduc, St. Albert, and Spruce Grove; the towns of Beaumont, Bon Accord, Calmar, Devon, Drayton Valley, Gibbons, Morinville, Redwater, and Stony Plain; the villages of Breton, Entwistle, Legal, New Sarepta, Thorsby, Wabamun, and Warburg; the municipal district of Sturgeon #90; and the counties of Leduc #25, Parkland #31 and Strathcona #20.] [The Census Metropolitan Area of Calgary includes the cities of Airdrie and Calgary; the towns of Cochrane and Crossfield; the villages of Beiseker and Irricana; the summer village of Chestermere Lake; the municipal district of Rocky View #44, and Sarcee Indian Reserve #145.


High Level
17
Fort McMurray
16
19
Grande Prairie
18
Grande Cache
Whitecourt
13
Bonnyville
12
Hinton
14
Edmonton
11
Leduc
10
Lloydminster
Camrose
Rocky Mountain House
9
8
Red Deer
Stettler
7
Drumheller
Hanna
4
15
Banff
6
Calgary
5
2
Medicine Hat
1
Lethbridge
Pincher Creek
3

Alberta
CANADA

CENSUS DIVISIONS

1986

Information Sources

The principal sources of information and data contained in this report are:

1. The 1980 edition of the *Canadian Classification and Dictionary of Occupations*;
2. Current professional legislation;
3. Provincial professional associations or licensing bodies for health and social service occupational groups (two of the 37 groups have no professional associations or licensing bodies);
4. Surveys of health and social service personnel working in Alberta conducted by the Alberta Health and Social Services Disciplines Committee;
5. Survey of health and social service education programs in Alberta conducted by Alberta Advanced Education;
6. Reports published and information provided by Health and Welfare Canada and other western provinces; and
7. Population totals and projections provided by the Alberta Bureau of Statistics, and municipal census data provided by Alberta Municipal Affairs.

The definitions in the *Canadian Classification and Dictionary of Occupations* have been used for most disciplines in this publication. In some cases, definitions were obtained from professional statutes or other sources. Information on legislation was obtained from provincial statutes governing the professions.

About half of the manpower data appearing in the report were obtained from professional associations and licensing bodies, particularly in cases where registration with a professional association or licensing body was mandatory. To obtain this information, a survey of professional associations and licensing bodies was conducted by the Alberta Health and Social Services Disciplines Committee in December 1987. For the remaining manpower groups, the survey of employers of health and social service personnel conducted by the Alberta Health and Social Services Disciplines Committee, was used as the data source.

Alberta Health and Social Service Education Programs Inventory December 1987 was the source of information on basic education programs contained in this publication. The inventory was compiled by Alberta Advanced Education through a survey of human services educational programs in Alberta's post-secondary institutions.

In order to put Alberta's manpower situation in national and regional contexts, provincial personnel-to-population ratios were compared to those for Canada and Western Canada where information from other jurisdictions was available. Health and Welfare Canada and provincial health departments of British Columbia, Manitoba, and Saskatchewan provided this information.

Data Limitations

Accuracy is considered of utmost importance in data collection. However, there can be deficiencies in the source of information. Some of these limitations are:

1. Some professional association registries included retired, honorary or associate members who may not have full practice rights. Where possible, such members were excluded for the purpose of this publication.

2. The number of practitioners is likely to be underestimated for those occupational groups where registration is not mandatory in order to practise. For such groups, the survey of employers of health and social service personnel was used as the source of data. Manpower statistics from the survey of employers indicate the number of personnel practising at the time of the survey. The registration data from professional associations or registration bodies provide manpower data about the potential number of personnel in the province; the actual number practising is generally lower than the total registered.

3. The dates for the data will vary depending on the source. March 31 is the date of the annual employment survey. The end of the membership year is used as the date for the data from professional associations. For most groups, but not all, this date is December 31.

4. Many of the following chapters contain a table indicating personnel-to-population ratios for Alberta, Western Canada, and Canada. The purpose is to provide comparisons with respect to current manpower status. Caution must be used when comparing these ratios because various sources are used and assumptions are not uniform.

Manpower Situation in 1987

Since 1979, the Alberta Health and Social Services Disciplines Committee has conducted manpower surveys of employers of health and social service personnel in Alberta. Fourteen surveys have been completed since then, two annually from 1979 to 1983, and one in each year since 1983. The Committee's fourteenth employer survey was conducted on March 31, 1987. Data were collected on 81 occupational groups from over 4,500 employing agencies, with a response rate of 98.7 percent.

Based on the March 31, 1987 survey, there were 71,497 persons employed in the health and social service sector which represented 57,745 "full-time equivalent" established positions.[1] At the time of the survey, there were 1,377 vacant "full-time equivalent" positions, representing an average vacancy rate of 2.4 percent. There were 6,988 resignations during the period from April 1, 1986 to March 31, 1987, representing an average turnover rate of 12.1 percent during the 12-month period prior to the survey.

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[1] "Full-time equivalent" established positions were calculated through the addition of data on full-time employment with data on part-time employment which had been converted to represent full-time employment.

Introduction

As of March 31, 1987, the occupational groups experiencing the highest vacancy rates were:

- Dental Hygienists (15.1%)
- Occupational Therapists (11.5%)
- Physical Therapists (10.7%)
- Occupational Hygienists (8.8%)
- Ultrasound Technologists (8.8%)
- Electrocardiographic Technicians (8.1%)
- Dental Technicians (Certified) (7.5%)
- Public Health Inspectors (6.7%)
- Pharmacists (6.2%)
- Dietitians (5.2%)

The manpower groups with the highest turnover rates from April 1, 1986 to March 31, 1987 were:

- Child Care Workers[1] (26.5%)
- Physical Therapists (23.6%)
- Rehabilitation Practitioners (22.9%)
- Occupational Therapists (22.2%)
- Recreational Therapists (19.4%)
- Dental Assistants (18.9%)
- Recreational Therapy Aides (18.0%)
- Probation and Parole Officers (16.8%)
- Dietary Technicians (15.0%)
- Psychiatric Nurses (14.9%)

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[1] The survey defined child care workers as individuals who cared for and counselled emotionally disturbed children and youths in institutional, group home or community settings. Day care workers and day care centres were not included in this survey.

Training of Health and Social Service Personnel

In 1986-87 Alberta had a total of 133 educational programs to train health and social service personnel. These training programs were found in 27 post-secondary educational institutions, hospitals, and cancer treatment centres in the province. In a few areas where there were no educational programs in the province, Alberta had inter-provincial training agreements with institutions outside the province.

Alberta Advanced Education, on behalf of the Alberta Health and Social Services Disciplines Committee, publishes annually a report entitled *Alberta Health and Social Service Education Programs Inventory*. The 1986-87 edition of this publication contains the following information on health and social service training programs in Alberta:

- Location and length of training programs;
- Number of applicants;
- First-year enrolment quota;
- Actual enrolments; and
- Number of graduates.

Readers who wish to obtain more information in these areas should consult this publication.

Format of the Publication

The format of this report remains the same as previous editions. The 37 occupational groups are organized alphabetically by chapter. Each chapter contains sections on:

- The functional definition and statistical highlights of the occupational group;
- Professional association, licensing authority, and regulatory legislation;
- The number of personnel, their geographical distribution, and historical and comparative manpower data; and
- Basic education programs.

There is a breakdown by speciality for three of the occupational groups: dentists, physicians, and registered nurses.

The table on page 8 provides summary information for the 37 occupational groups.

Summary Information

	Number of Registered/ Practising Personnel	Personnel -to- Population Ratio	Legislation	Number of Training Programs	Number of Graduates
Audiologists and Speech Pathologists	346	1:6,879		2	30
Biomedical Engineers	17	1:140,012		3	2
Child Care Workers	1,428	1:1,667		3	71
Chiropractors	312	1:7,629	X	-	-
Combined Laboratory and X-Ray Technicians	311	1:7,653		1	15
Community Health Representatives	40	1:59,505		1	15
Dental Assistants	2,032	1:1,171	X	3	153
Dental Hygienists	645	1:3,690	X	1	39
Dental Technicians	177	1:13,447	X	1	15
Dentists	1,276	1:1,865	X	1	42
Denturists	201	1:11,842	X	1	14
Dietary Technicians	261	1:9,120		2	45
Dietitians/ Nutritionists	359	1:6,630	X	3	36
Emergency Medical Technicians	1,366	1:1,742	X	4	352
Health Record Administrators	149	1:15,974		1	12
Health Record Technicians	293	1:8,124		1	16
Medical Laboratory Technologists	2,294	1:1,038		3	130
Medical Radiation Technologists	1,074	1:2,216	X	4	74
Occupational Hygiene Technologists	113	1:21,064		1	3
Occupational Therapists	348	1:6,840		2	47

Summary Information (continued)

	Number of Registered/ Practising Personnel	Personnel -to- Population Ratio	Legislation	Number of Training Programs	Number of Graduates
Ophthalmic Dispensers	359	1:6,630	X	2	43
Optometrists	212	1:11,227	X	-	-
Pharmacists	1,980	1:1,202	X	1	77
Pharmacy Assistants	465	1:5,119		1	38
Physical Therapists	1,135	1:2,097	X	2	49
Physicians	4,005	1:594	X	2	187
Podiatrists	21	1:3,343	X	-	-
Prosthetists and Orthotists	34	1:70,006		-	-
Psychiatric Nurses	1,018	1:2,338	X	2	51
Psychologists	1,121	1:2,123	X	10	126
Public Health Inspectors	126	1:18,890	X	-	-
Recreational Therapists	262	1:9,085		1	24
Registered Nurses	22,034	1:108	X	24	1,207
Registered Nursing Assistants	7,414	1:321	X	3	265
Rehabilitation Practitioners	1,548	1:1,538		8	147
Respiratory Therapists	457	1:5,208	X	2	51
Social Workers	2,443	1:974	X	6	380

Audiologists and Speech Pathologists

I. Overview

Definition: Audiologists

Provide diagnostic evaluation and rehabilitative services and conduct research related to hearing. Administer air and bone conduction and other audiometric tests and examinations to determine hearing efficiency. Coordinate audiometric results with medical, social, behavioural and other diagnostic data. Evaluate total response pattern and acoustic tests to differentiate between organic and non-organic hearing loss. Plan, direct and participate in counselling, speech-reading and other rehabilitation programs. Act as consultants to educational, medical and other professional groups. Conduct research in physiology, pathology, biophysics and psychophysics of auditory system, if required. Design and develop clinical and research procedures and apparatus, if required.

Speech Pathologists

Diagnose and treat speech, language and voice disorders and perform related research. Administer tests and observe patient to diagnose nature of disorder and to evaluate degree of impairment. Plan and conduct remedial exercises and programs to correct stuttering, abnormal articulation and other disorders. Provide speech training for patient with communication problems caused by cerebral palsy, surgical removal of larynx, hearing deficiencies or other impairments. Plan individual or group therapy in rehabilitation of communication disorders. Counsel and guide language-handicapped individuals and their families, teachers or employers. Act as consultants to educational, medical, dental and other professional groups. Conduct research related to development of diagnostic and treatment techniques and procedures or design of apparatus.

(Source: *Canadian Classification and Dictionary of Occupations*. Ottawa, Ontario: Employment and Immigration Canada, 1980)

There were 338 audiologists and speech pathologists registered with the Speech and Hearing Association of Alberta (S.H.A.A.) in 1987.[1] However, registration is not compulsory for audiologists and speech pathologists. According to a survey of health and social service employers, conducted by the Alberta Health and Social Services Disciplines Committee, there were 27 audiologists and 319 speech pathologists practising in Alberta.[2]

According to this survey, approximately 37 percent of those professionals were employed by local school boards and in schools for the handicapped. Another 30 percent worked in acute care hospitals and almost 25 percent were employed by health units.[3]

Eighty-five percent of the audiologists and 71 percent of the speech pathologists were employed in the Census Metropolitan Areas of Calgary and Edmonton. The provincial audiologist-to-population ratio was 1:88,156 and the provincial speech pathologist-to-population ratio was 1:7,461 in 1987.

II. Professional Association and Legislation Information

a) Licensing, Registration, or Certification Authority:

None.

b) Professional Association:

Speech and Hearing Association of Alberta
Box 86,
Main Post Office
Edmonton, Alberta
T5J 2G9

President: Marguerite Hartwig
President Elect: Ms. Kathy Ryan

c) Legislation:

There is no legislation regulating audiologists and speech pathologists in Alberta at present.

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[1] Source: Speech and Hearing Association of Alberta. Number of speech and hearing personnel registered with the S.H.A.A. as of October 31, 1987.

[2] Source: "Health and Social Service Personnel Working in Alberta, March 31, 1987", Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[3] Ibid.

III. Personnel Data

TABLE 1A

GEOGRAPHIC DISTRIBUTION OF PRACTISING AUDIOLOGISTS, ALBERTA, 1987

Census Division (Major Urban Centre)	Number Practising[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	0	56,700	–
2 (Lethbridge)	1	115,000	1:115,000
3 (Pincher Creek)	0	34,400	–
4 (Hanna)	0	12,000	–
5 (Drumheller)	0	38,100	–
6 (Calgary excluding CMA)	0	42,618	–
7 (Stettler)	0	40,400	–
8 (Red Deer)	0	118,400	–
9 (Rocky Mountain House)	0	16,000	–
10 (Camrose)	0	79,100	–
11 (Edmonton excluding CMA)	0	24,171	–
12 (Bonnyville)	0	45,100	–
13 (Whitecourt)	0	54,400	–
14 (Hinton)	0	24,800	–
15 (Banff)	0	23,100	–
16 (Fort McMurray)	0	48,600	–
17 (High Level)	0	49,600	–
18 (Grande Cache)	0	13,300	–
19 (Grande Prairie)	3	74,300	1:24,767
Census Metropolitan Area (CMA) of Calgary	11	682,782[3]	1:62,071
Census Metropolitan Area (CMA) of Edmonton	12	787,329[3]	1:65,611
PROVINCIAL TOTAL	**27**	**2,380,200**	**1:88,156**

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[1] Source: "Health and Social Service Personnel Working in Alberta, March 31, 1987", Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[2] Source: "Estimates of Population and Growth by Alberta Census Divisions", Alberta Bureau of Statistics, May 1988.

[3] Source: Alberta Municipal Affairs and Alberta Bureau of Statistics, October 1987.

TABLE 1B

GEOGRAPHIC DISTRIBUTION OF PRACTISING SPEECH PATHOLOGISTS, ALBERTA, 1987

Census Division (Major Urban Centre)	Number Practising[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	10	56,700	1:5,670
2 (Lethbridge)	15	115,000	1:7,667
3 (Pincher Creek)	7	34,400	1:4,914
4 (Hanna)	2	12,000	1:6,000
5 (Drumheller)	2	38,100	1:19,050
6 (Calgary excluding CMA)	3	42,618	1:14,206
7 (Stettler)	2	40,400	1:20,200
8 (Red Deer)	10	118,400	1:11,840
9 (Rocky Mountain House)	0	16,000	–
10 (Camrose)	6	79,100	1:13,183
11 (Edmonton excluding CMA)	6	24,171	1:4,029
12 (Bonnyville)	4	45,100	1:11,275
13 (Whitecourt)	4	54,400	1:13,600
14 (Hinton)	2	24,800	1:12,400
15 (Banff)	2	23,100	1:11,550
16 (Fort McMurray)	3	48,600	1:16,200
17 (High Level)	2	49,600	1:24,800
18 (Grande Cache)	2	13,300	1:6,650
19 (Grande Prairie)	11	74,300	1:6,755
Census Metropolitan Area (CMA) of Calgary	87	682,782[3]	1:7,848
Census Metropolitan Area (CMA) of Edmonton	139	787,329[3]	1:5,664
PROVINCIAL TOTAL	**319**	**2,380,200**	**1:7,461**

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[1] Source: "Health and Social Service Personnel Working in Alberta, March 31, 1987", Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[2] Source: "Estimates of Population and Growth by Alberta Census Divisions", Alberta Bureau of Statistics, May 1988.

[3] Source: Alberta Municipal Affairs and Alberta Bureau of Statistics, October 1987.

TABLE 2

SELECTED MANPOWER STATISTICS FOR AUDIOLOGISTS AND SPEECH PATHOLOGISTS IN ALBERTA, 1985, 1986, AND 1987

	1985	1986	1987
Number of Practising Personnel[1]	325	330	346
% Change in Number of Practising Personnel	N/A	1.5%	4.8%
Population (Alberta)[2]	2,348,500	2,375,300	2,380,200
% Change in Population	0.4%	1.1%	0.2%
Personnel-to-Population Ratio:			
- Alberta	1:7,226	1:7,198	1:6,879

IV. Educational Programs

There is a four-year baccalaureate degree in speech pathology offered at the University of Alberta. The program produced 30 graduates in 1986-87. This program includes courses in speech pathology and audiology. However, graduates from this program only qualify as speech pathologists. Audiologists require training at the graduate level.

A master's program in speech pathology was introduced in 1986-87 at the University of Alberta.

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[1] Source: "Health and Social Service Personnel Working in Alberta", March 31, 1985, 1986, 1987, Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[2] Source: "Alberta Population Growth, Fourth Quarter, 1987", Alberta Bureau of Statistics, March 1988.

TABLE 3

EDUCATIONAL PROGRAMS FOR AUDIOLOGISTS AND SPEECH PATHOLOGISTS IN ALBERTA[1]

	1984-85	1985-86	1986-87
A. **BACCALAUREATE PROGRAM** University of Alberta Bachelor of Science in Speech Pathology (Program Length: 4 years)			
Enrolments:			
1st Year	Pre-Professional Year	Pre-Professional Year	Pre-Professional Year
2nd Year	34	35	35
3rd Year	28	31	35
4th Year	24	24	31
Graduates:	24	24	30
B. **MASTER'S PROGRAM** University of Alberta Master's of Science in Speech Pathology[2] (Program Length: 2 years)			
Enrolments:			
1st Year	-	-	3
Graduates:	-	-	-

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[1] Source: *Alberta Health and Social Service Education Programs Inventory, 1986-87*. Edmonton, Alberta: Department of Advanced Education, December 1987.

[2] The Graduate program commenced in 1986-87.

Biomedical Engineers

I. Overview

Definition: "Biomedical Engineering - usually either graduate engineers, mostly in electrical engineering with graduate training and experience in the biomedical sciences; or graduate engineers working in the field of biomedical engineering. Can play the following roles: provide engineering supervision of the technical staff, manage educational programs for others in the staff, efficient use of equipment, provide engineering consultation, improvement or innovative design of equipment, conduct research."[1]

(Source: *Development in Biomedical Engineering in Canada - Manpower and Governmental Activities*. Ottawa, Ontario: Health Manpower Directorate, Department of National Health and Welfare, 1973; pp. 2-3).

There were 17 biomedical engineers who resided in Alberta and registered with the Canadian Medical and Biological Engineering Society in 1987.[2] Biomedical engineers located in the Census Metropolitan Areas of Calgary and Edmonton accounted for 82 percent of the total. The provincial biomedical engineer-to-population ratio was 1:140,012 in 1987.

II. Professional Association and Legislation Information

a) Licensing, Registration, or Certification Authority:

None.

b) Professional Association:

Canadian Medical and Biological Engineering Society
c/o National Research Council
Building M-50, Room 164
Ottawa, Ontario
K1A 0R6

President: Dr. Walter Zingg

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[1] The term, "biomedical engineer," is often used much more loosely to cover physicists, computing scientists, and other specialists and technicians, working in the biomedical field, many of whom are not qualified as engineers. In this chapter, this broader interpretation is used.

[2] Source: Canadian Medical and Biological Engineering Society. Number of biomedical engineers registered with the Canadian Medical and Biological Engineering Society and residing in Alberta as of December 31, 1987.

c) **Legislation:**

There is no legislation regulating biomedical engineers in Alberta at present.

III. Personnel Data

TABLE 1

GEOGRAPHIC DISTRIBUTION OF REGISTERED BIOMEDICAL ENGINEERS, ALBERTA, 1987

Census Division (Major Urban Centre)	Number Practising[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	0	56,700	-
2 (Lethbridge)	0	115,000	-
3 (Pincher Creek)	0	34,400	-
4 (Hanna)	0	12,000	-
5 (Drumheller)	0	38,100	-
6 (Calgary excluding CMA)	0	42,618	-
7 (Stettler)	0	40,400	-
8 (Red Deer)	0	118,400	-
9 (Rocky Mountain House)	0	16,000	-
10 (Camrose)	0	79,100	-
11 (Edmonton excluding CMA)	1	24,171	1:24,171
12 (Bonnyville)	0	45,100	-
13 (Whitecourt)	0	54,400	-
14 (Hinton)	0	24,800	-
15 (Banff)	0	23,100	-
16 (Fort McMurray)	1	48,600	1:48,600
17 (High Level)	0	49,600	-
18 (Grande Cache)	0	13,300	-
19 (Grande Prairie)	1	74,300	1:74,300
Census Metropolitan Area (CMA) of Calgary	3	682,782[3]	1:227,594
Census Metropolitan Area (CMA) of Edmonton	11	787,329[3]	1:71,575
PROVINCIAL TOTAL	**17**	**2,380,200**	**1:140,012**

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[1] Source: Canadian Medical and Biological Engineering Society. Number of biomedical engineers registered with the Canadian Medical and Biological Engineering Society and residing in Alberta as of December 31, 1987.

[2] Source: "Estimates of Population and Growth by Alberta Census Divisions", Alberta Bureau of Statistics, May 1988.

[3] Source: Alberta Municipal Affairs and Alberta Bureau of Statistics, October 1987.

TABLE 2

SELECTED MANPOWER STATISTICS FOR BIOMEDICAL ENGINEERS IN ALBERTA, 1985, 1986, AND 1987

	1985	1986	1987
Number of Practising Personnel[1]	19	17	17
% Change in Number of Practising Personnel	-17.4%	-10.5%	0.0%
Population (Alberta)[2]	2,348,500	2,375,300	2,380,200
% Change in Population	0.4%	1.1%	0.2%
Personnel-to-Population Ratio:			
- Alberta	1:123,605	1:139,724	1:140,012

IV. Educational Programs

The Department of Applied Sciences in Medicine at the University of Alberta offers graduate programs for physicists, engineers, computing scientists and other specialists. In addition, master's and doctoral degree programs are available to students registered in the engineering or science faculties but carrying out their research in the Faculty of Medicine. In 1986-87, one student graduated from the master's program and one from the doctoral program.

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[1] Source: Canadian Medical and Biological Engineering Society. Number of biomedical engineers registered with the Canadian Medical and Biological Engineering Society and residing in Alberta as of December 31 of the year indicated.

[2] Source: "Alberta Population Growth, Fourth Quarter, 1987", Alberta Bureau of Statistics, March 1988.

TABLE 3

EDUCATIONAL PROGRAMS FOR BIOMEDICAL ENGINEERS IN ALBERTA[1]

		1984-85	1985-86	1986-87
A.	**MASTER'S PROGRAMS** University of Alberta Master's of Science offered by the Faculties of Engineering and Science (Program Length: variable)			
	Enrolments:	2	9	1
	Graduates:	1	6	1
	University of Alberta Master's of Science offered by the Department of Applied Sciences in Medicine (Program Length: variable)			
	Enrolments:	4	5	1
	Graduates:	0	2	0
	PROVINCIAL TOTAL Number of M.Sc. Programs: 2			
	Graduates	1	8	1
B.	**Ph.D. PROGRAM** University of Alberta (Program Length: variable)			
	Enrolments:	3	5	4
	Graduates:	1	2	1

---

[1] Source: Department of Applied Sciences in Medicine and Department of Biomedical Engineering, Faculty of Electrical Engineering, University of Alberta.

Child Care Workers

I. Overview

Definition: Provide care and counselling to children, youth and their families. The child or youth with emotional and/or behavioral problems is often the main focus of attention. The worker establishes a relationship with the child or youth and engages him in activities planned to teach competence and responsibility. Child and youth care includes the following tasks: shape the child or youth's environment to support his development of skills; manage a child or youth's maladaptive behavior; mediate between children, youth and their families as appropriate; assess and communicate the progress of children and youth; provide individual and group activities in a living or community setting; teach living skills and independent skills. Settings include the family home, school, residential facilities, group homes, hospitals, foster homes and community environments.

Source: Alberta Social Services

Since registration with the Child Care Workers' Association of Alberta is not mandatory, the survey of health and social service personnel working in Alberta, conducted on March 31, 1987 by the Alberta Health and Social Services Disciplines Committee, was used as an alternative source of manpower information.

There were 1,428 child care workers practising in Alberta in 1987.[1] Child care workers employed in the Census Metropolitan Areas of Calgary and Edmonton accounted for 67 percent of the total. The provincial child care worker-to-population ratio was 1:1,667 in 1987.

Since child care workers primarily work with children and adolescents, the adjusted provincial child care worker-to-population (5-17 years) ratio was 1:329 in 1987.[2]

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[1] Source: "Health and Social Service Personnel Working in Alberta, March 31, 1987", Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[2] Source: Population short term projections, Alberta, 1986-1991, Edmonton, Alberta: Alberta Bureau of Statistics, 1987.

II. Professional Association and Legislation Information

a) Licensing, Registration, or Certification Authority:

None.

b) Professional Association:

Child Care Workers' Association of Alberta
P.O. Box 11360
Edmonton, Alberta
T5J 3K6

President: Mr. Jeff Reid

c) Legislation:

There is no legislation regulating child care workers in Alberta at present.

III. Personnel Data

TABLE 1A

GEOGRAPHIC DISTRIBUTION OF PRACTISING CHILD CARE WORKERS, ALBERTA, 1987

Census Division (Major Urban Centre)	Number Practising[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	20	56,700	1:2,835
2 (Lethbridge)	62	115,000	1:1,855
3 (Pincher Creek)	31	34,400	1:1,110
4 (Hanna)	0	12,000	-
5 (Drumheller)	30	38,100	1:1,270
6 (Calgary excluding CMA)	16	42,618	1:2,664
7 (Stettler)	13	40,400	1:3,108
8 (Red Deer)	53	118,400	1:2,234
9 (Rocky Mountain House)	3	16,000	1:5,333
10 (Camrose)	23	79,100	1:3,439
11 (Edmonton excluding CMA)	18	24,171	1:1,343
12 (Bonnyville)	47	45,100	1:960
13 (Whitecourt)	2	54,400	1:27,200
14 (Hinton)	6	24,800	1:4,133
15 (Banff)	6	23,100	1:3,850
16 (Fort McMurray)	67	48,600	1:725
17 (High Level)	32	49,600	1:1,550
18 (Grande Cache)	0	13,300	-
19 (Grande Prairie)	41	74,300	1:1,812
Census Metropolitan Area (CMA) of Calgary	574	682,782[3]	1:1,190
Census Metropolitan Area (CMA) of Edmonton	384	787,329[3]	1:2,050
PROVINCIAL TOTAL	**1,428**	**2,380,200**	**1:1,667**

---

[1] Source: "Health and Social Service Personnel Working in Alberta, March 31, 1987", Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[2] Source: "Estimates of Population and Growth by Alberta Census Divisions", Alberta Bureau of Statistics, May 1988.

[3] Source: Alberta Municipal Affairs and Alberta Bureau of Statistics, October 1987.

TABLE 1B

COMMUNITY BREAKDOWN OF CHILD CARE WORKERS, ALBERTA, 1987

Community by Population Size	Number Practising[1]	Population[2]	Personnel-to-Population Ratio
Over 60,000			
Census Metropolitan Area (CMA) of Calgary	574	682,782[3]	1:1,190
Census Metropolitan Area (CMA) of Edmonton	384	787,329[3]	1:2,050
Between 10,000 and 60,000			
Camrose	20	12,968	1:648
Fort McMurray	30	34,949	1:1,165
Grande Prairie	31	26,471	1:854
Lethbridge	50	60,610	1:1,212
Lloydminster	0	10,201	-
Medicine Hat	20	41,804	1:2,090
Red Deer	44	54,309	1:1,234
Wetaskiwin	18	10,103	1:561
Between 5,000 and 10,000			
Bonnyville	7	5,575	1:796
Brooks	0	9,464	-
Crowsnest Pass	0	6,912	-
Drumheller	0	6,366	-
Edson	0	7,323	-
High River	9	5,096	1:566
Hinton	6	8,629	1:1,438
Innisfail	1	5,513	1:5,513
Lacombe	3	6,080	1:2,027
Okotoks	0	5,522	-
Peace River	0	6,355	-
Ponoka	0	5,473	-
Rocky Mountain House	3	5,261	1:1,754
Slave Lake	7	5,538	1:791
St. Paul	4	5,128	1:1,282
Stettler	0	5,147	-
Taber	0	6,382	-
Vegreville	2	5,276	1:2638
Whitecourt	1	5,737	1:5,737
Under 5,000	214	541,897	1:3,132
PROVINCIAL TOTAL	**1,428**	**2,380,200[4]**	**1:1,667**

---

[1] Source: "Health and Social Service Personnel Working in Alberta, March 31, 1987", Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[2] Source: "Official Population List", Municipal Services Branch, Alberta Municipal Affairs, September 1987.

[3] Source: Alberta Municipal Affairs and Alberta Bureau of Statistics, October 1987.

[4] Source: "Alberta Population Growth, Fourth Quarter, 1987", Alberta Bureau of Statistics, March, 1988.

TABLE 2

SELECTED MANPOWER STATISTICS FOR CHILD CARE WORKERS IN ALBERTA, 1985, 1986 AND 1987

	1985	1986	1987
Number of Practising Personnel[1]	1,358	1,312	1,428
% Change in Number of Practising Personnel	3.0%	-3.4%	8.8%
Population (Alberta)[2]	2,348,500	2,375,300	2,380,200
% Change in Population	0.4%	1.1%	0.2%
Personnel-to-Population Ratio:			
- Alberta	1:1,729	1:1,810	1:1,667

---

[1] Source: "Health and Social Service Personnel Working in Alberta", March 31, 1985, 1986, 1987, Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[2] Source: "Alberta Population Growth, Fourth Quarter, 1987", Alberta Bureau of Statistics, March 1988.

IV. Educational Programs

Grant MacEwan Community College, Lethbridge Community College, and Mount Royal College each offer a two-year child care worker diploma program. The three programs produced 71 graduates in 1986-87.

TABLE 3

EDUCATIONAL PROGRAMS FOR CHILD CARE WORKERS IN ALBERTA[1]

	1984-85	1985-86	1986-87
DIPLOMA CHILD CARE PROGRAMS			
Grant MacEwan Community College (Program Length: 2 years)			
Enrolments:			
1st Year	74	83	72
2nd Year	40	48	47
Graduates:	23	33	39
Lethbridge Community College (Program Length: 2 years)			
Enrolments:			
1st Year	21	28	33
2nd Year	-	16	16
Graduates:	-	12	15
Mount Royal College (Program Length: 2 years)			
Enrolments:			
1st Year	24	36	51
2nd Year	21	20	31
Graduates:	16	17	17
PROVINCIAL TOTAL Number of Training Programs: 3			
Graduates:	39	62	71

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[1] Source: *Alberta Health and Social Service Education Programs Inventory, 1986-1987*. Edmonton, Alberta: Department of Advanced Education, December 1987.

Chiropractors

I. Overview

Definition: A chiropractor practises within the branch of the healing arts concerned with the restoration and maintenance of human health by the chiropractic adjustment or manipulation of the spinal column and other articulations of the body and includes the use of x-ray and other analytical instruments, therapies and diagnostic procedures.

(Source: *The Chiropractic Profession Act*, S.A. 1984, Ch. C9.1)

There were 312 chiropractors who resided in Alberta and registered with the College of Chiropractors of Alberta (C.C.A.) in 1987.[1] Chiropractors located in the Census Metropolitan Areas of Calgary and Edmonton accounted for 58 percent of the total. The number of chiropractors registered in Alberta increased by 5.0 percent between 1985 and 1987 while the provincial population grew by 1.3 percent during the same period. The provincial chiropractor-to-population ratio was 1:7,629 in 1987.

II. Professional Association and Legislation Information

a) Professional Association/Registration Body:

College of Chiropractors of Alberta
516, 10235 - 101 Street
Edmonton, Alberta
T5J 3G1

President: Dr. Graden J. Bridge

b) Legislation:

Under the authority of the Chiropractic Profession Act, all individuals who wish to practise as chiropractors must register with the College of Chiropractors of Alberta. Annual re-registration with the Association is required of all chiropractors in order to continue to practise in Alberta.

The C.C.A. is responsible for registration, maintaining professional discipline and practice review. The Universities Coordinating Council has the authority to approve faculties of chiropractic and determine equivalencies for registration purposes.

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[1] Source: College of Chiropractors of Alberta. Number of chiropractors registered with the C.C.A. and residing in Alberta as of June 30, 1987. Excludes inactive, honorary, and retired members.

III. Personnel Data

TABLE 1

GEOGRAPHIC DISTRIBUTION OF REGISTERED CHIROPRACTORS, ALBERTA, 1987

Census Division (Major Urban Centre)	Number Practising[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	10	56,700	1:5,670
2 (Lethbridge)	26	115,000	1:4,423
3 (Pincher Creek)	4	34,400	1:8,600
4 (Hanna)	1	12,000	1:12,000
5 (Drumheller)	7	38,100	1:5,443
6 (Calgary excluding CMA)	9	42,618	1:4,735
7 (Stettler)	6	40,400	1:6,733
8 (Red Deer)	20	118,400	1:5,920
9 (Rocky Mountain House)	3	16,000	1:5,333
10 (Camrose)	11	79,100	1:7,191
11 (Edmonton excluding CMA)	4	24,171	1:6,043
12 (Bonnyville)	3	45,100	1:15,033
13 (Whitecourt)	7	54,400	1:7,771
14 (Hinton)	4	24,800	1:6,200
15 (Banff)	3	23,100	1:7,700
16 (Fort McMurray)	3	48,600	1:16,200
17 (High Level)	1	49,600	1:49,600
18 (Grande Cache)	0	13,300	-
19 (Grande Prairie)	9	74,300	1:8,256
Census Metropolitan Area (CMA) of Calgary	92	682,782[3]	1:7,422
Census Metropolitan Area (CMA) of Edmonton	89	787,329[3]	1:8,846
PROVINCIAL TOTAL	**312**	**2,380,200**	**1:7,629**

---

[1] Source: College of Chiropractors of Alberta. Number of chiropractors registered with the C.C.A. and residing in Alberta as of June 30, 1987. Excludes inactive, honorary, and retired members.

[2] Source: "Estimates of Population and Growth by Alberta Census Divisions", Alberta Bureau of Statistics, May 1988.

[3] Source: Alberta Municipal Affairs and Alberta Bureau of Statistics, October 1987.

TABLE 2

SELECTED MANPOWER STATISTICS FOR CHIROPRACTORS IN ALBERTA, 1985, 1986, AND 1987

	1985	1986	1987
Number of Registered Personnel[1]	297	316	312
% Change in Number of Registered Personnel	-0.7%	6.4%	-1.3%
Population (Alberta)[2]	2,348,500	2,375,300	2,380,200
% Change in Population	0.4%	1.1%	0.2%
Personnel-to-Population Ratios:			
- Alberta	1:7,907	1:7,517	1:7,629
- Western Canada[3]	-	1:8,501	-

IV. Educational Programs

In Canada, chiropractic training can be obtained at the Canadian Memorial Chiropractic College in Toronto which offers a four-year program. Many of Alberta's chiropractors received their chiropractic training in the United States.

---

[1] Source: Alberta Chiropractic Association. Number of chiropractors registered with the Alberta Chiropractic Association and residing in Alberta. Excludes inactive, honorary, and retired members.

[2] Source: "Alberta Population Growth, Fourth Quarter, 1987", Alberta Bureau of Statistics, March 1988.

[3] Sources: (i) *Rollcall 85*. Vancouver, British Columbia: Division of Health Services Research and Development, University of British Columbia, March 1986. (ii) Health Services Commission, Research and Planning, Manitoba Health, Winnipeg, Manitoba. (iii) Policy Research and Management Services, Saskatchewan Health, Regina, Saskatchewan. (iv) Survey of professional associations conducted by the Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

Combined Laboratory and X-Ray Technicians

I. Overview

Definition: The combined technician is a hospital worker trained to perform laboratory and x-ray work in smaller hospitals that do not have sufficient volume or range of work to warrant employing both a laboratory technologist and an x-ray technician.

(Source: *Saskatchewan Health Manpower Annual Report 1976*. Regina, Saskatchewan: Saskatchewan Health, 1976)

Since registration with the Alberta Society of Certified Combined Technicians is not mandatory, the survey of health and social service personnel working in Alberta, conducted on March 31, 1987 by the Alberta Health and Social Services Disciplines Committee, was used as an alternative source of manpower information.

There were 311 combined laboratory and x-ray technicians practising in Alberta in 1987.[1] Slightly over 50 percent of these individuals were employed in acute care hospitals having less than 300 beds. Another 35 percent were employed in medical laboratories and radiological facilities.[2] The Census Metropolitan Areas of Calgary and Edmonton accounted for 35 percent of the total. In urban centers, services provided by combined laboratory and x-ray technicians are usually provided by medical laboratory technologists and medical radiation technologists (see chapters on Medical Laboratory Technologists and Medical Radiation Technologists). The provincial personnel-to-population ratio was 1:7,653 in 1987.

---

[1] Source: "Health and Social Service Personnel Working in Alberta, March 31, 1987", Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[2] Ibid.

II. Professional Association and Legislation Information

a) Licensing, Registration, or Certification Authority:

None.

b) Professional Association:

Alberta Association of Combined Laboratory and X-Ray Technicians
P.O. Box 2575
Drayton Valley, Alberta
T0E 0M0

President: Ms. Colleen Sekura

c) Legislation:

The discipline of combined laboratory and x-ray technicians has been designated for regulation under the Health Disciplines Act. The Combined Laboratory and X-Ray Technicians Committee is preparing regulations which are expected to be approved in 1988. These regulations will set out the educational standards required for registration under the Act and reserve titles for registered members.

III. Personnel Data

TABLE 1
GEOGRAPHIC DISTRIBUTION OF PRACTISING COMBINED LABORATORY AND X-RAY TECHNICIANS, ALBERTA, 1987

Census Division (Major Urban Centre)	Number Practising[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	1	56,700	1:56,700
2 (Lethbridge)	19	115,000	1:6,053
3 (Pincher Creek)	6	34,400	1:5,733
4 (Hanna)	5	12,000	1:2,400
5 (Drumheller)	15	38,100	1:2,540
6 (Calgary excluding CMA)	9	42,618	1:4,735
7 (Stettler)	24	40,400	1:1,683
8 (Red Deer)	22	118,400	1:5,382
9 (Rocky Mountain House)	5	16,000	1:3,200
10 (Camrose)	28	79,100	1:2,825
11 (Edmonton excluding CMA)	0	24,171	-
12 (Bonnyville)	14	45,100	1:3,221
13 (Whitecourt)	18	54,400	1:3,022
14 (Hinton)	9	24,800	1:2,756
15 (Banff)	1	23,100	1:23,100
16 (Fort McMurray)	2	48,600	1:24,300
17 (High Level)	13	49,600	1:3,815
18 (Grande Cache)	4	13,300	1:3,325
19 (Grande Prairie)	7	74,300	1:10,614
Census Metropolitan Area (CMA) of Calgary	25	682,782[3]	1:27,311
Census Metropolitan Area (CMA) of Edmonton	84	787,329[3]	1:9,373
PROVINCIAL TOTAL	**311**	**2,380,200**	**1:7,653**

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[1] Source: "Health and Social Service Personnel Working in Alberta, March 31, 1987", Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[2] Source: "Estimates of Population and Growth by Alberta Census Divisions", Alberta Bureau of Statistics, May 1988.

[3] Source: Alberta Municipal Affairs and Alberta Bureau of Statistics, October 1987.

TABLE 2

SELECTED MANPOWER STATISTICS FOR COMBINED LABORATORY AND X-RAY TECHNICIANS IN ALBERTA, 1985, 1986 AND 1987

	1985	1986	1987
Number of Practising Personnel[1]	349	296	311
% Change in Number of Practising Personnel	14.4%	-15.2%	5.1%
Population (Alberta)[2]	2,348,500	2,375,300	2,380,200
% Change in Population	0.4%	1.1%	0.2%
Personnel-to-Population Ratios:			
- Alberta	1:6,729	1:8,025	1:7,653

IV. Educational Programs

The Northern Alberta Institute of Technology offers a one-year combined laboratory and x-ray technology certificate program. The program produced 15 graduates in 1986-87.

TABLE 3

EDUCATIONAL PROGRAM FOR COMBINED LABORATORY AND X-RAY TECHNICIANS IN ALBERTA[3]

	1984-85	1985-86	1986-87
Northern Alberta Institute of Technology (Program Length: 1 year)			
Enrolments:	51	20	23
Graduates:	26	18	15

---

[1] Source: "Health and Social Service Personnel Working in Alberta", March 31, 1985, 1986, 1987, Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[2] Source: "Alberta Population Growth, Fourth Quarter, 1987", Alberta Bureau of Statistics, March 1988.

[3] Source: *Alberta Health and Social Service Education Training Programs Inventory, 1986-87*. Edmonton, Alberta: Department of Advanced Education, December 1987.

Community Health Representatives

I. Overview

Definition: Provide health education and advice primarily to native communities.

(Source: Employer Survey Questionnaire: Alberta Health and Social Services Disciplines Committee, 1987).

Since registration with the Community Health Representative Association is not mandatory, the survey of health and social service personnel working in Alberta, conducted on March 31, 1987 by the Alberta Health and Social Services Disciplines Committee, was used as an alternative source of manpower information.

There were 40 community health representatives practising in Alberta in 1987.[1] These individuals were mainly employed by community health and social service agencies and Health and Welfare Canada.[2] Community health representatives in the Census Metropolitan Areas of Calgary and Edmonton accounted for 7.5 percent of the total. The provincial personnel-to-population ratio was 1:59,505 in 1987.

II. Professional Association and Legislation Information

a) Licensing, Registration, or Certification Authority:

None.

b) Professional Association:

Community Health Representative Association
c/o Alberta Indian Health Care Commission
1390 First Edmonton Place
10665 Jasper Avenue
Edmonton, Alberta
T5J 3S9

President: Ms. Betty Smith

c) Legislation:

None.

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[1] Source: "Health and Social Service Personnel Working in Alberta, March 31, 1987", Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[2] Ibid.

III. Personnel Data

TABLE 1

GEOGRAPHIC DISTRIBUTION OF COMMUNITY HEALTH REPRESENTATIVES, ALBERTA, 1987

Census Division (Major Urban Centre)	Number Practising[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	0	56,700	-
2 (Lethbridge)	0	115,000	-
3 (Pincher Creek)	6	34,400	1:5,733
4 (Hanna)	0	12,000	-
5 (Drumheller)	2	38,100	1:19,050
6 (Calgary excluding CMA)	0	42,618	-
7 (Stettler)	0	40,400	-
8 (Red Deer)	0	118,400	-
9 (Rocky Mountain House)	2	16,000	1:8,000
10 (Camrose)	1	79,100	1:79,100
11 (Edmonton excluding CMA)	0	24,171	-
12 (Bonnyville)	1	45,100	1:45,100
13 (Whitecourt)	0	54,400	-
14 (Hinton)	0	24,800	-
15 (Banff)	0	23,100	-
16 (Fort McMurray)	16	48,600	1:3,038
17 (High Level)	8	49,600	1:6,200
18 (Grande Cache)	0	13,300	-
19 (Grande Prairie)	1	74,300	1:74,300
Census Metropolitan Area (CMA) of Calgary	2	682,782[3]	1:341,391
Census Metropolitan Area (CMA) of Edmonton	1	787,329[3]	1:787,329
PROVINCIAL TOTAL	**40**	**2,380,200**	**1:59,505**

---

[1] Source: "Health and Social Service Personnel Working in Alberta, March 31, 1987", Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[2] Source: "Estimates of Population and Growth by Alberta Census Divisions", Alberta Bureau of Statistics, May 1988.

[3] Source: Alberta Municipal Affairs and Alberta Bureau of Statistics, October 1987.

TABLE 2

SELECTED MANPOWER STATISTICS FOR COMMUNITY HEALTH REPRESENTATIVES IN ALBERTA, 1985, 1986 AND 1987

	1985	1986	1987
Number of Practising Personnel[1]	93	73	40
% Change in Number of Practising Personnel	N/A	-21.5%	-45.2%
Population (Alberta)[2]	2,348,500	2,375,300	2,380,200
% Change in Population	0.4 %	1.1 %	0.2 %
Personnel-to-Population Ratios:			
- Alberta	1:25,253	1:32,538	1:59,505

IV. Educational Programs

The Alberta Vocational Centre in Lac La Biche offers a nine-month certificate program in community health work. The program produced 15 graduates in 1986-87.

TABLE 3

EDUCATIONAL PROGRAM FOR COMMUNITY HEALTH REPRESENTATIVES IN ALBERTA[3]

	1984-85	1985-86	1986-87
Alberta Vocational Centre, Lac La Biche (Program Length: 9 months.)			
Enrolments:	34	21	25
Graduates:	26	14	15

---

[1] Source: "Health and Social Service Personnel Working in Alberta", March 31, 1985, 1986, 1987, Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[2] Source: "Alberta Population Growth, Fourth Quarter, 1987", Alberta Bureau of Statistics, March 1988.

[3] Source: *Alberta Health and Social Service Education Programs Inventory, 1986-87*. Edmonton, Alberta: Department of Advanced Education, December 1987.

Dental Assistants

I. Overview

Definition: Assist dentists in care and treatment of patients. Seat and prepare patient for dental treatment. Arrange instruments, materials and medications and hand them to the dentist. Keep oral operating area clear during dental procedure by using suction devices, water sprays, cotton rolls and holders, and by retraction of cheek and tongue. Prepare filling materials, using mechanical amalgamator and instruments and supply them to dentist as required. Comfort patient through reassuring conversation and actions. Give emergency treatment, as directed by dentist, for local and systemic distress. Advise patients on post-operative care, oral hygiene, and importance of diet and preventive dentistry. Sterilize instruments using ovens, autoclaves and aseptic solutions. Pour, trim and mount plaster models from impressions taken by dentist and perform other dental laboratory procedures. Perform routine maintenance duties such as lubricating equipment, sharpening dental instruments, replacing expendable parts and cleaning equipment and treatment area. Expose, process and mount X-ray films. Polish teeth, apply fluoride to teeth and perform other intra-oral procedures, as permitted by training and by provincial legislation. Act as receptionist, if required.

(Source: *Canadian Classification and Dictionary of Occupations*. Ottawa, Ontario: Employment and Immigration Canada, 1980)

As of September 15, 1987, there were 1,701 certified and non-certified members of the Alberta Dental Assistants Association. However, since registration is not mandatory, the survey of health and social service personnel working in Alberta, conducted on March 31, 1987 by the Alberta Health and Social Services Disciplines Committee, was used as an alternative source of manpower information.

According to the survey, 2,032 dental assistants were practising in the province in 1987.[1] Approximately 93 percent of these individuals were employed in dentists' offices.[2] Dental assistants employed in the Census Metropolitan Areas of Calgary and Edmonton accounted for 71 percent of the total. The provincial dental assistant-to-population ratio was 1:1,171 in 1987.

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[1] Source: "Health and Social Service Personnel Working in Alberta, March 31, 1987", Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[2] Ibid.

II. Professional Association and Legislation Information

a) Professional Association/Certification Body:

Alberta Dental Assistants Association
42 Beacon Crescent
St. Albert, Alberta
T8N 0A3

Executive Director/Registrar: Ms. Melanie Bachand
President: Ms. Evelyn Roethlingshoefer
President Elect: Ms. Dorothy McNish

b) Legislation:

The Dental Profession Act established the Dental Occupations Council consisting of two dental hygienists, two dentists, and two dental assistants. The representatives are appointed by their respective professional association. This group recommends regulations to the Board of the Alberta Dental Association regarding the duties, conditions of practice, and standards of conduct and competency for dental assistants.

Currently, routine dental assisting does not require certification. Intra-oral functions, however, may only be provided by those dental assistants who have been certified by the Alberta Dental Assistants Association.

Regulations giving the Alberta Dental Assistants Association the authority to register and discipline dental assistants are being considered under the Dental Profession Act.

III. Personnel Data

TABLE 1A

GEOGRAPHIC DISTRIBUTION OF PRACTISING DENTAL ASSISTANTS, ALBERTA, 1987

Census Division (Major Urban Centre)	Number Practising[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	41	56,700	1:1,383
2 (Lethbridge)	106	115,000	1:1,085
3 (Pincher Creek)	17	34,400	1:2,024
4 (Hanna)	7	12,000	1:1,714
5 (Drumheller)	20	38,100	1:1,905
6 (Calgary excluding CMA)	28	42,618	1:1,522
7 (Stettler)	17	40,400	1:2,376
8 (Red Deer)	88	118,400	1:1,345
9 (Rocky Mountain House)	7	16,000	1:2,286
10 (Camrose)	44	79,100	1:1,798
11 (Edmonton excluding CMA)	12	24,171	1:2,014
12 (Bonnyville)	43	45,100	1:1,049
13 (Whitecourt)	36	54,400	1:1,511
14 (Hinton)	11	24,800	1:2,255
15 (Banff)	17	23,100	1:1,359
16 (Fort McMurray)	31	48,600	1:1,568
17 (High Level)	13	49,600	1:3,815
18 (Grande Cache)	4	13,300	1:3,325
19 (Grande Prairie)	45	74,300	1:1,651
Census Metropolitan Area (CMA) of Calgary	641	682,782[3]	1:1,065
Census Metropolitan Area (CMA) of Edmonton	804	787,329[3]	1:979
PROVINCIAL TOTAL	**2,032**	**2,380,200**	**1:1,171**

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[1] Source: "Health and Social Service Personnel Working in Alberta, March 31, 1987", Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[2] Source: "Estimates of Population and Growth by Alberta Census Divisions", Alberta Bureau of Statistics, May 1988.

[3] Source: Alberta Municipal Affairs and Alberta Bureau of Statistics, October 1987.

TABLE 1B

COMMUNITY BREAKDOWN OF DENTAL ASSISTANTS, ALBERTA, 1987

Community by Population Size	Number Practising[1]	Population[2]	Personnel -to- Population Ratio
Over 60,000			
Census Metropolitan Area (CMA) of Calgary	641	682,782[3]	1:1,065
Census Metropolitan Area (CMA) of Edmonton	804	787,329[3]	1:979
Between 10,000 and 60,000			
Camrose	14	12,968	1:926
Fort McMurray	29	34,949	1:1,205
Grande Prairie	25	26,471	1:1,059
Lethbridge	79	60,610	1:767
Lloydminster	7	10,201	1:1,457
Medicine Hat	39	41,804	1:1,072
Red Deer	64	54,309	1:849
Wetaskiwin	11	10,103	1:918
Between 5,000 and 10,000			
Bonnyville	6	5,575	1:929
Brooks	9	9,464	1:1,052
Crowsnest Pass	5	6,912	1:1,382
Drumheller	7	6,366	1:909
Edson	6	7,323	1:1,221
High River	9	5,096	1:566
Hinton	5	8,629	1:1,726
Innisfail	6	5,513	1:919
Lacombe	6	6,080	1:1,013
Okotoks	7	5,522	1:789
Peace River	11	6,355	1:578
Ponoka	7	5,473	1:782
Rocky Mountain House	7	5,261	1:752
Slave Lake	5	5,538	1:1,108
St. Paul	11	5,128	1:466
Stettler	7	5,147	1:735
Taber	4	6,382	1:1,596
Vegreville	7	5,276	1:754
Whitecourt	8	5,737	1:717
Under 5,000	186	541,897	1:2,913
PROVINCIAL TOTAL	**2,032**	**2,380,200[4]**	**1:1,171**

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[1] Source: "Health and Social Service Personnel Working in Alberta, March 31, 1987", Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[2] Source: "Official Population List", Municipal Services Branch, Alberta Municipal Affairs, September 1987.

[3] Source: Alberta Municipal Affairs and Alberta Bureau of Statistics, October 1987.

[4] Source: "Alberta Population Growth, Fourth Quarter, 1987", Alberta Bureau of Statistics, March 1988.

TABLE 2

SELECTED MANPOWER STATISTICS FOR DENTAL ASSISTANTS IN ALBERTA, 1985, 1986 AND 1987

	1985	1986	1987
Number of Practising Personnel[1]	1,838	1,983	2,032
% Change in Number of Practising Personnel	2.9%	7.9%	2.5%
Population (Alberta)[2]	2,348,500	2,375,300	2,380,200
% Change in Population	0.4%	1.1%	0.2%
Personnel-to-Population Ratios:			
- Alberta	1:1,278	1:1,198	1:1,171

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[1] Source: "Health and Social Service Personnel Working in Alberta, March 31, 1987", Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[2] Source: "Alberta Population Growth, Fourth Quarter, 1987", Alberta Bureau of Statistics, March 1988.

IV. Educational Programs

Both the Southern Alberta Institute of Technology and the Northern Alberta Institute of Technology offer dental assistant certificate training programs. The two programs produced 111 graduates in 1986-87. In addition, the Northern Alberta Institute of Technology offers a correspondence training program. This program, which is 24 months in length and is designed for dental assistants presently employed, had 280 students and 42 graduates in 1986-87.

TABLE 3

EDUCATIONAL PROGRAMS FOR DENTAL ASSISTANTS IN ALBERTA[1]

	1984-85	1985-86	1986-87
Northern Alberta Institute of Technology (Program Length: 9 1/2 months)			
Enrolments:	76	76	72
Graduates:	65	74	67
Correspondence Program (Program Length: 24 months)			
Enrolments:	-	-	280
Graduates:	-	-	42
Southern Alberta Institute of Technology (Program Length: 39 weeks)			
Enrolments:	40	40	48
Graduates:	38	39	44
PROVINCIAL TOTAL Number of Training Programs: 3			
Graduates:	103	113	153

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[1] Source: *Alberta Health and Social Service Education Programs Inventory, 1986-87*. Edmonton, Alberta: Department of Advanced Education, December 1987.

Dental Hygienists

I. Overview

Definition: Provide preventive dental services and instruct patients in care of teeth and mouth. Scale and polish teeth to remove hard and soft deposits, using dental instruments and equipment. Polish fillings to remove tarnish and corrosion, using motorized apparatus. Apply topical agents and sealants to teeth to reduce decay. Conduct preliminary dental examination and record case history of patient. Record observed conditions and information for diagnosis and treatment planning by dentist. Instruct individuals and groups in home dental care and provide dietary counselling related to dental health. Expose, process and mount dental x-ray films. Take impressions of teeth for study models. Administer local anaesthetics, place, finish and polish fillings, and remove sutures as permitted by training and by provincial legislation.[1]

(Source: *Canadian Classification and Dictionary of Occupations*. Ottawa, Ontario: Employment and Immigration Canada, 1980).

Since registration with the Alberta Dental Hygienists' Association is not mandatory, the survey of health and social service personnel working in Alberta, conducted on March 31, 1987 by the Alberta Health and Social Services Disciplines Committee, was used as an alternative source of manpower information.

According to the survey, 645 dental hygienists were practising in the province in 1987.[2] About 83 percent of these individuals were employed in dentists' offices and 13 percent were employed in health units.[3] Dental hygienists employed in the Census Metropolitan Areas of Calgary and Edmonton accounted for 75 percent of the total. The provincial dental hygienist-to-population ratio was 1:3,690 in 1987.

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[1] Alberta legislation does not permit dental hygienists to engage in activities described in the last sentence.

[2] Source: "Health and Social Service Personnel Working in Alberta, March 31, 1987", Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[3] Ibid.

II. Professional Association and Legislation Information

a) Licensing, Registration, or Certification Authority:

None.

b) Professional Association:

Alberta Dental Hygienists' Association
9916 - 173 Avenue
Edmonton, Alberta
T5X 3X9

President: Ms. Christine Clavier

c) Legislation:

The Dental Profession Act established the Dental Occupations Council consisting of two dental hygienists, two dentists, and two dental assistants. The representatives are appointed by their respective professional association. This group recommends regulations to the Board of the Alberta Dental Association regarding the duties, conditions of practice, and standards of conduct and competency for dental hygienists.

In order to practise in the province, dental hygienists must be graduates of the Dental Hygiene program at the University of Alberta. If they are graduates from other training programs, they must be certified by the Universities Coordinating Council.

Although registration and licensure are not mandatory at present, regulations giving the Alberta Dental Hygienists' Association the authority to register and discipline dental hygienists are being considered under the Dental Profession Act.

III. Personnel Data

TABLE 1A

GEOGRAPHIC DISTRIBUTION OF PRACTISING DENTAL HYGIENISTS, ALBERTA, 1987

Census Division (Major Urban Centre)	Number Practising[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	8	56,700	1:7,088
2 (Lethbridge)	19	115,000	1:6,053
3 (Pincher Creek)	3	34,400	1:11,467
4 (Hanna)	3	12,000	1:4,000
5 (Drumheller)	5	38,100	1:7,620
6 (Calgary excluding CMA)	11	42,618	1:3,874
7 (Stettler)	3	40,400	1:13,467
8 (Red Deer)	35	118,400	1:3,383
9 (Rocky Mountain House)	0	16,000	-
10 (Camrose)	16	79,100	1:4,944
11 (Edmonton excluding CMA)	5	24,171	1:4,834
12 (Bonnyville)	9	45,100	1:5,011
13 (Whitecourt)	3	54,400	1:18,133
14 (Hinton)	4	24,800	1:6,200
15 (Banff)	4	23,100	1:5,775
16 (Fort McMurray)	16	48,600	1:3,038
17 (High Level)	3	49,600	1:16,533
18 (Grande Cache)	1	13,300	1:13,300
19 (Grande Prairie)	13	74,300	1:5,715
Census Metropolitan Area (CMA) of Calgary	236	682,782[3]	1:2,893
Census Metropolitan Area (CMA) of Edmonton	248	787,329[3]	1:3,175
PROVINCIAL TOTAL	**645**	**2,380,200**	**1:3,690**

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[1] Source: "Health and Social Service Personnel Working in Alberta, March 31, 1987", Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[2] Source: "Estimates of Population and Growth by Alberta Census Divisions", Alberta Bureau of Statistics, May 1988.

[3] Source: Alberta Municipal Affairs and Alberta Bureau of Statistics, October 1987.

TABLE 1B

COMMUNITY BREAKDOWN OF DENTAL HYGIENISTS, ALBERTA, 1987

Community by Population Size	Number Practising[1]	Population[2]	Personnel-to-Population Ratio
Over 60,000			
Census Metropolitan Area (CMA) of Calgary	236	682,782[3]	1:2,893
Census Metropolitan Area (CMA) of Edmonton	248	787,329[3]	1:3,175
Between 10,000 and 60,000			
Camrose	7	12,968	1:1,853
Fort McMurray	14	34,949	1:2,496
Grande Prairie	9	26,471	1:2,941
Lethbridge	14	60,610	1:4,329
Lloydminster	3	10,201	1:3,400
Medicine Hat	8	41,804	1:5,226
Red Deer	27	54,309	1:2,011
Wetaskiwin	5	10,103	1:2,021
Between 5,000 and 10,000			
Bonnyville	3	5,575	1:1,858
Brooks	2	9,464	1:4,732
Crowsnest Pass	0	6,912	-
Drumheller	3	6,366	1:2,122
Edson	1	7,323	1:7,323
High River	5	5,096	1:1,019
Hinton	3	8,629	1:2,876
Innisfail	1	5,513	1:5,513
Lacombe	4	6,080	1:1,517
Okotoks	1	5,522	1:5,522
Peace River	3	6,355	1:2,118
Ponoka	2	5,473	1:2,737
Rocky Mountain House	0	5,261	-
Slave Lake	0	5,538	-
St. Paul	2	5,128	1:2,564
Stettler	2	5,147	1:2,574
Taber	0	6,382	-
Vegreville	2	5,276	1:2,638
Whitecourt	0	5,737	-
Under 5,000	40	541,897	1:13,547
PROVINCIAL TOTAL	**645**	**2,380,200[4]**	**1:3,690**

---

[1] Source: "Health and Social Service Personnel Working in Alberta, March 31, 1987", Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[2] Source: "Official Population List", Municipal Services Branch, Alberta Municipal Affairs, September 1987.

[3] Source: Alberta Municipal Affairs and Alberta Bureau of Statistics, October 1987.

[4] Source: "Alberta Population Growth, Fourth Quarter, 1987", Alberta Bureau of Statistics, March 1988.

TABLE 2

SELECTED MANPOWER STATISTICS FOR DENTAL HYGIENISTS IN ALBERTA, 1985, 1986 AND 1987

	1985	1986	1987
Number of Practising Personnel[1]	598	601	645
% Change in Number of Practising Personnel	6.4%	0.5%	7.3%
Population (Alberta)[2]	2,348,500	2,375,300	2,380,200
% Change in Population	0.4%	1.1%	0.2%
Personnel-to-Population Ratios:			
- Alberta	1:3,927	1:3,952	1:3,690

IV. Educational Programs

The University of Alberta offers a two-year dental hygiene diploma program. The program produced 39 graduates in 1986-87.

TABLE 3

EDUCATIONAL PROGRAM FOR DENTAL HYGIENISTS IN ALBERTA[3]

	1984-85	1985-86	1986-87
University of Alberta (Program Length: 2 years)			
Enrolments:			
1st Year	43	43	43
2nd Year	35	40	39
Graduates	35	40	39

---

[1] Source: "Health and Social Service Personnel Working in Alberta, March 31, 1985, 1986, 1987", Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[2] Source: "Alberta Population Growth, Fourth Quarter, 1987", Alberta Bureau of Statistics, March 1988.

[3] Source: *Alberta Health and Social Service Education Programs Inventory, 1986-87*. Edmonton, Alberta: Department of Advanced Education, December 1987.

Dental Technicians

I. Overview

Definition: Make and repair dentures and other dental devices. Fabricate full and partial dentures, using wax and plaster models, dental surveyors, articulators (fitting devices) and electric grinders and polishers. Shape metal, vulcanite or plastic plates for dentures. Mount porcelain or plastic teeth in plates using knowledge of size, shape, shade and colour. Finish dentures on grinding and buffing wheels. Construct metal clasps, inlays, bridgework and other aides according to specifications. Join breaks, make additions or reline denture bases to repair dentures.

(Source: *Canadian Classification and Dictionary of Occupations*. Ottawa, Ontario: Employment and Immigration Canada, 1980).

There were 177 dental technicians who resided in Alberta and registered with the Dental Technicians Board in 1987.[1] Dental technicians located in the Census Metropolitan Areas of Calgary and Edmonton accounted for 85 percent of the total. Dentists in rural areas of the province contract some of their dental laboratory work to dental technicians in the major cities.

The provincial dental technician-to-population ratio was 1:13,447 in 1987. Some of the services performed by dental technicians, such as the making of complete dentures, can also be provided by denturists (see chapter on Denturists).

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[1] Source: Dental Technicians Board. Number of dental technicians registered with the Dental Technicians Board and residing in Alberta as of December 31, 1987. Number includes dental technicians who were also denturists.

II. Professional Association and Legislation Information

a) Licensing, Registration, or Certification Authority:

Dental Technicians Board
c/o Professions and Occupations Bureau
9th Floor, John E. Brownlee Building
10365 - 97 Street
Edmonton, Alberta
T5J 3W7

Chairman: Dr. T. Curry

b) Professional Association:

Alberta Society of Registered Dental Technicians
211, 11523 - 100 Avenue
Edmonton, Alberta
T5K 0S8

President: Mr. Gary Fedoretz

c) Legislation:

Under the authority of the Dental Technicians Act, any individual who carries on a business as a dental technician must register with the Dental Technicians Board, a provincial government licensing body. The Dental Technicians Board is responsible for maintaining professional discipline and setting the educational qualifications required for registration. The titles "dental technician" and "registered dental technician" are reserved under the Act for registered members.

III. Personnel Data

TABLE 1

GEOGRAPHIC DISTRIBUTION OF REGISTERED DENTAL TECHNICIANS, ALBERTA, 1987

Census Division (Major Urban Centre)	Number Practising[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	3	56,700	1:18,900
2 (Lethbridge)	10	115,000	1:11,500
3 (Pincher Creek)	0	34,400	-
4 (Hanna)	0	12,000	-
5 (Drumheller)	0	38,100	-
6 (Calgary excluding CMA)	2	42,618	1:21,309
7 (Stettler)	0	40,400	-
8 (Red Deer)	1	118,400	1:118,400
9 (Rocky Mountain House)	0	16,000	-
10 (Camrose)	2	79,100	1:39,550
11 (Edmonton excluding CMA)	3	24,171	1:8,057
12 (Bonnyville)	0	45,100	-
13 (Whitecourt)	1	54,400	1:54,400
14 (Hinton)	0	24,800	-
15 (Banff)	0	23,100	-
16 (Fort McMurray)	0	48,600	-
17 (High Level)	0	49,600	-
18 (Grande Cache)	0	13,300	-
19 (Grande Prairie)	3	74,300	1:24,767
Census Metropolitan Area (CMA) of Calgary	59	682,782[3]	1:11,573
Census Metropolitan Area (CMA) of Edmonton	92	787,329[3]	1:8,558
Regional Location Unknown	1		
PROVINCIAL TOTAL	**177**	**2,380,200**	**1:13,447**

---

[1] Source: Dental Technicians Board. Number of dental technicians registered with the Dental Technicians Board and residing in Alberta as of December 31, 1987. Number includes dental technicians who were also denturists.

[2] Source: "Estimates of Population and Growth by Alberta Census Divisions", Alberta Bureau of Statistics, May 1988.

[3] Source: Alberta Municipal Affairs and Alberta Bureau of Statistics, October 1987.

TABLE 2

SELECTED MANPOWER STATISTICS FOR DENTAL TECHNICIANS IN ALBERTA, 1985, 1986, AND 1987

	1985	1986	1987
Number of Registered Personnel[1]	145	168	177
% Change in Number of Registered Personnel	-1.4%	15.9%	5.4%
Population (Alberta)[2]	2,348,500	2,375,300	2,380,200
% Change in Population	0.4%	1.1%	0.2%
Personnel-to-Population Ratios:			
- Alberta	1:16,197	1:14,139	1:13,447

IV. Educational Programs

In order to become a dental technician, an individual must pass the examination set by the Dental Technicians Board and must have either five years of practical experience, one of which is in Alberta, or a two-year dental technician diploma plus three years of practical experience.

A two-year dental laboratory technology diploma program is offered at the Northern Alberta Institute of Technology (N.A.I.T.). The program produced 15 graduates in 1986-87.

TABLE 3

EDUCATIONAL PROGRAM FOR DENTAL TECHNICIANS IN ALBERTA[3]

	1984-85	1985-86	1986-87
Northern Alberta Institute of Technology (Program Length: 2 years)			
Enrolments:			
1st Year	18	18	18
2nd Year	15	15	15
Graduates:	12	11	15

---

[1] Source: Dental Technicians Board. Number of dental technicians registered with the Dental Technicians Board and residing in Alberta as of the indicated year. Number includes dental technicians who were also denturists.

[2] Source: "Alberta Population Growth, Fourth Quarter, 1987", Alberta Bureau of Statistics, March 1988.

[3] Source: *Alberta Health and Social Service Education Programs Inventory 1986-87*. Edmonton, Alberta: Department of Advanced Education, December 1987.

Dentists

I. Overview

Definition: The work of dentists is concerned with examining, diagnosing, preventing and treating ailments or abnormalities of gums and teeth, and includes oral surgery.

(Source: *Canadian Classification and Dictionary of Occupations*. Ottawa, Ontario: Employment and Immigration Canada, 1980)

There were 1,276 dentists who resided in Alberta and registered with the Alberta Dental Association (A.D.A.) in 1987.[1] Of these dentists, 88 percent were general practitioners and 12 percent were specialists. The number of dentists by specialty is shown in Table 4 of this chapter. About 70 percent of the dentists were graduates of the University of Alberta Faculty of Dentistry, 22 percent were graduates of dental training programs in other Canadian provinces, and 8 percent were graduates of schools of dentistry in other countries.

Dentists located in the Census Metropolitan Areas of Calgary and Edmonton accounted for 74 percent of the total. The number of dentists registered in Alberta increased by 7.6 percent between 1985 and 1987 while the provincial population grew by 1.3 percent during the same period. The provincial dentist-to-population ratio was 1:1,865 in 1987.

---

[1] Source: Alberta Dental Association. Number of dentists registered with the A.D.A. and residing in Alberta as of December 31, 1987. Excludes inactive and retired members and some dentists who worked for the Federal Government but were not registered with the A.D.A.

II. Professional Association and Legislation Information

a) Professional Association/Registration Board:

Alberta Dental Association
101, 8230 - 105 Street
Edmonton, Alberta
T6E 5H9

Executive Director, Registrar: Dr. B. P. Martinello
President: Dr. V. H. Jones
President Elect: Dr. R. D. Aitken

b) Legislation:

Under the authority of the Dental Profession Act, all individuals who wish to practise as dentists must register with the Alberta Dental Association (A.D.A.).

Besides registration functions, the A.D.A. is responsible for regulating the conduct of its members and for practice review. The Dental Profession Act sets the educational qualifications required for registration with the A.D.A. Post-basic educational qualifications required for registration as a dental specialist are set in regulation. The Universities Coordinating Council is responsible for the certification of specialists. The professional association also has the authority to prescribe continuing education programs which must be completed by members in order to qualify for re-registration.

III. Personnel Data

TABLE 1A

GEOGRAPHIC DISTRIBUTION OF REGISTERED DENTISTS, ALBERTA, 1987

Census Division (Major Urban Centre)	Number Practising[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	21	56,700	1:2,700
2 (Lethbridge)	43	115,000	1:2,674
3 (Pincher Creek)	13	34,400	1:2,646
4 (Hanna)	3	12,000	1:4,000
5 (Drumheller)	13	38,100	1:2,931
6 (Calgary excluding CMA)	12	42,618	1:3,552
7 (Stettler)	13	40,400	1:3,108
8 (Red Deer)	60	118,400	1:1,973
9 (Rocky Mountain House)	4	16,000	1:4,000
10 (Camrose)	22	79,100	1:3,595
11 (Edmonton excluding CMA)	11	24,171	1:2,197
12 (Bonnyville)	25	45,100	1:1,804
13 (Whitecourt)	16	54,400	1:3,400
14 (Hinton)	10	24,800	1:2,480
15 (Banff)	14	23,100	1:1,650
16 (Fort McMurray)	13	48,600	1:3,738
17 (High Level)	7	49,600	1:7,086
18 (Grande Cache)	3	13,300	1:4,433
19 (Grande Prairie)	27	74,300	1:2,752
Census Metropolitan Area (CMA) of Calgary	421	682,782[3]	1:1,622
Census Metropolitan Area (CMA) of Edmonton	525	787,329[3]	1:1,500
PROVINCIAL TOTAL	**1,276**	**2,380,200**	**1:1,865**

---

[1] Source: Alberta Dental Association. Number of dentists registered with the A.D.A. and residing in Alberta as of December 31, 1987. Excludes inactive and retired members and some dentists who worked for the Federal Government but were not registered with the A.D.A.

[2] Source: "Estimates of Population and Growth by Alberta Census Divisions", Alberta Bureau of Statistics, May 1988.

[3] Source: Alberta Municipal Affairs and Alberta Bureau of Statistics, October 1987.

TABLE 1B

COMMUNITY BREAKDOWN OF DENTISTS, ALBERTA, 1987

Community by Population Size	Number Practising[1]	Population[2]	Personnel-to-Population Ratio
Over 60,000			
Census Metropolitan Area (CMA) of Calgary	421	682,782[3]	1:1,622
Census Metropolitan Area (CMA) of Edmonton	525	787,329[3]	1:1,500
Between 10,000 and 60,000			
Camrose	7	12,968	1:1,853
Fort McMurray	13	34,949	1:2,688
Grande Prairie	14	26,471	1:1,891
Lethbridge	32	60,610	1:1,894
Lloydminster	6	10,201	1:1,700
Medicine Hat	19	41,804	1:2,200
Red Deer	43	54,309	1:1,263
Wetaskiwin	4	10,103	1:2,526
Between 5,000 and 10,000			
Bonnyville	4	5,575	1:1,394
Brooks	3	9,464	1:3,155
Crowsnest Pass	0	6,912	-
Drumheller	4	6,366	1:1,592
Edson	5	7,323	1:1,465
High River	3	5,096	1:1,699
Hinton	5	8,629	1:1,726
Innisfail	5	5,513	1:1,103
Lacombe	5	6,080	1:1,216
Okotoks	3	5,522	1:1,841
Peace River	4	6,355	1:1,589
Ponoka	3	5,473	1:1,824
Rocky Mountain House	4	5,261	1:1,315
Slave Lake	3	5,538	1:1,846
St. Paul	6	5,128	1:855
Stettler	3	5,147	1:1,716
Taber	3	6,382	1:2,127
Vegreville	3	5,276	1:1,759
Whitecourt	3	5,737	1:1,912
Under 5,000	123	541,897	1:4,406
PROVINCIAL TOTAL	**1,276**	**2,380,200[4]**	**1:1,865**

---

[1] Source: Alberta Dental Association. Number of dentists registered with the A.D.A. and residing in Alberta as of December 31, 1987. Excludes inactive and retired members and some dentists who worked for the Federal Government but were not registered with the A.D.A.

[2] Source: "Official Population List", Municipal Services Branch, Alberta Municipal Affairs, September 1987.

[3] Source: Alberta Municipal Affairs and Alberta Bureau of Statistics, October 1987.

[4] Source: "Alberta Population Growth, Fourth Quarter, 1987", Alberta Bureau of Statistics, March 1988.

TABLE 2

SELECTED MANPOWER STATISTICS FOR DENTISTS IN ALBERTA, 1985, 1986, AND 1987

	1985	1986	1987
Number of Registered Personnel[1]	1,186	1,224	1,276
% Change in Number of Registered Personnel	3.3%	3.2%	4.2%
Population (Alberta)[2]	2,348,500	2,375,300	2,380,200
% Change in Population	0.4%	1.1%	0.2%
Personnel-to-Population Ratio:			
- Alberta	1:1,980	1:1,941	1:1,865
- Western Canada[3]	1:1,916	-	-

IV. Educational Programs

The University of Alberta offers a four-year Doctor of Dental Surgery (D.D.S.) degree program. Two years of "pre-dentistry" university preparation is a pre-requisite for acceptance into the program. The program produced 42 graduates in 1986-87.

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[1] Source: Alberta Dental Association. Number of dentists registered with the A.D.A. and residing in Alberta as of December 31 of the indicated year. Excludes inactive and retired members and some dentists who worked for the Federal Government but were not registered with the A.D.A.

[2] Source: "Alberta Population Growth, Fourth Quarter, 1987", Alberta Bureau of Statistics, March 1988.

[3] The 1985 information is based on: (i) *Rollcall 85*, Vancouver, British Columbia: Division of Health Services Research and Development, University of British Columbia, March 1986. (ii) Health Services Commission, Research and Planning, Manitoba Health, Winnipeg, Manitoba. (iii) Policy Research and Management Services, Saskatchewan Health, Regina, Saskatchewan. (iv) Survey of professional associations and licensing bodies conducted by the Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

TABLE 3

EDUCATIONAL PROGRAM FOR DENTISTS IN ALBERTA[1]

	1984-85	1985-86	1986-87
University of Alberta (Program Length: 4 years)			
Enrolments:			
1st Year	52	50	50
2nd Year	47	46	46
3rd Year	47	46	46
4th Year	45	44	44
Graduates:	44	44	42

---

[1] Source: *Alberta Health and Social Service Education Programs Inventory, 1986-87*. Edmonton, Alberta: Department of Advanced Education, December 1987.

TABLE 4

DENTISTS BY SPECIALTY, ALBERTA, 1987[1]

Specialty	Number of Dentists	Personnel-to-Population Ratio
Dental Public Health	3	1:789,545
Endodontics	14	1:169,188
Oral Pathology	5	1:473,727
Oral Radiology	3	1:789,545
Oral and Maxillofacial Surgery	21	1:112,792
Orthodontics	51	1:46,444
Paedodontics	16	1:148,040
Periodontics	19	1:124,665
Prosthodontics	20	1:118,432
Specialty Total	152	1:15,583
General Practice Total	1,124	1:2,107
GRAND TOTAL	**1,276**	**1:1,856**

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[1] Source: Alberta Dental Association. Number of dentists registered with the A.D.A. and residing in Alberta as of December 31, 1987. Excludes inactive and retired members and some dentists who worked for the Federal Government but were not registered with the A.D.A.

Denturists

I. Overview

Definition: Design, construct, fit and repair dentures. Measure patient's jaws to determine size and shape of dentures using face bows, dental articulators and other devices. Make impressions and moulds of teeth, gums and jaws and design dentures. Direct other workers to construct dentures.

(Source: *Canadian Classification and Dictionary of Occupations*. Ottawa, Ontario: Employment and Immigration Canada, 1980)

There were 201 certified denturists (formerly known as certified dental mechanics) who resided in Alberta and registered with the Board of Examiners for Certified Dental Mechanics in 1987.[1] Denturists located in the Census Metropolitan Areas of Calgary and Edmonton accounted for 69 percent of the total. The number of denturists certified in Alberta increased by 11.7 percent between 1985 and 1987 while the provincial population grew by 1.3 percent during the same period. The provincial denturist-to-population ratio was 1:11,842 in 1987.

Denturists usually offer their services from denture clinics independent of a dentist. In Alberta, denturists are permitted to furnish complete dentures only, that is, appliances for individuals with no natural upper or lower teeth. Some of the services performed by denturists, such as the manufacture of complete dentures, are also provided by dental technicians. However, dental technicians are not permitted to fit appliances. Other functions of denturists, such as taking impressions for complete dentures, are also carried out by dentists (see chapters on Dental Technicians and Dentists).

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[1] Source: The Board of Examiners for Certified Dental Mechanics. Number of denturists registered with the Board and residing in Alberta as of December 31, 1987. Number includes denturists who were also dental technicians.

II. Professional Association and Legislation Information

a) Licensing, Registration, or Certification Authority:

Board of Examiners for Certified
Dental Mechanics
c/o Professions and Occupations Bureau
9th Floor, John E. Brownlee Building
10365 - 97 Street
Edmonton, Alberta
T5J 3W7

Chairman: Mr. Elmar Abele

b) Professional Association:

Denturist Society of Alberta
201 Century Centre
2 Athabascan Avenue
Sherwood Park, Alberta
T8A 4E3

President: Mr. Robert Richardson

c) Legislation:

Under the authority of the Dental Mechanics Act, individuals who wish to practise as denturists in the province must be certified by and registered with the Board of Examiners for Certified Dental Mechanics, a provincial government licensing body. Registration with the Denturist Society of Alberta is voluntary.

The Board is responsible for regulating the conduct of denturists and for maintaining professional discipline. It is empowered to re-examine any denturist at any time and to suspend or cancel his/her certification if warranted. The Board also sets the educational qualifications required for certification as a denturist in Alberta.

In 1981, the Dental Mechanics Act was amended to permit dental mechanics to identify themselves as "denturists". The titles "denturist", "dental mechanic", and "certified dental mechanic" are reserved for individuals registered under the Act.

III. Personnel Data

TABLE 1

GEOGRAPHIC DISTRIBUTION OF REGISTERED DENTURISTS, ALBERTA, 1987

Census Division (Major Urban Centre)	Number Practising[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	4	56,700	1:14,175
2 (Lethbridge)	12	115,000	1:9,583
3 (Pincher Creek)	1	34,400	1:34,400
4 (Hanna)	0	12,000	-
5 (Drumheller)	4	38,100	1:9,525
6 (Calgary excluding CMA)	1	42,618	1:42,618
7 (Stettler)	3	40,400	1:13,467
8 (Red Deer)	11	118,400	1:10,764
9 (Rocky Mountain House)	1	16,000	1:16,000
10 (Camrose)	10	79,100	1:7,910
11 (Edmonton excluding CMA)	0	24,171	-
12 (Bonnyville)	2	45,100	1:22,550
13 (Whitecourt)	3	54,400	1:18,133
14 (Hinton)	2	24,800	1:12,400
15 (Banff)	1	23,100	1:23,100
16 (Fort McMurray)	3	48,600	1:16,200
17 (High Level)	1	49,600	1:49,600
18 (Grande Cache)	0	13,300	-
19 (Grande Prairie)	4	74,300	1:18,575
Census Metropolitan Area (CMA) of Calgary	52	682,782[3]	1:13,130
Census Metropolitan Area (CMA) of Edmonton	86	787,329[3]	1:9,155
PROVINCIAL TOTAL	**201**	**2,380,200**	**1:11,842**

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[1] Source: The Board of Examiners for Certified Dental Mechanics. Number of denturists registered with the Board and residing in Alberta as of December 31, 1987. Number includes denturists who were also dental technicians.

[2] Source: "Estimates of Population and Growth by Alberta Census Divisions", Alberta Bureau of Statistics, May 1988.

[3] Source: Alberta Municipal Affairs and Alberta Bureau of Statistics, October 1987.

TABLE 2

SELECTED MANPOWER STATISTICS FOR DENTURISTS IN ALBERTA, 1985, 1986, AND 1987

	1985	1986	1987
Number of Registered Personnel[1]	180	188	201
% Change in Number of Registered Personnel	4.0%	4.4%	6.9%
Population (Alberta)[2]	2,348,500	2,375,300	2,380,200
% Change in Population	0.4%	1.1%	0.2%
Personnel-to-Population Ratios:			
- Alberta	1:13,047	1:12,634	1:11,842
- Western Canada[3]	1:16,983	-	-

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[1] Source: The Board of Examiners for Certified Dental Mechanics. Number of denturists registered with the Board and residing in Alberta. Note: The figure for 1985 in this table is different from the corresponding figure in the 1985 publication, "Health and Social Service Manpower in Alberta, 1985". The figure in this edition is from the Board of Examiners, whereas in 1985, the figure came from the Denturist Society of Alberta.

[2] Source: "Alberta Population Growth, Fourth Quarter, 1987", Alberta Bureau of Statistics, March 1988.

[3] Source: (i) *Rollcall 85*. Vancouver, British Columbia: Division of Health Services Research and Development, University of British Columbia, March 1986. (ii) Health Services Commission, Research and Planning, Manitoba Health, Winnipeg, Manitoba. (iii) Policy Research and Management Services, Saskatchewan Health, Regina, Saskatchewan. (iv) Survey of professional associations and licensing bodies conducted by the Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

IV. Educational Programs

In Alberta, there are two routes that a person may take in order to become a denturist. One is to apprentice for five years under the supervision of a certified denturist. During this time students are required to complete examinations at four levels conducted by the Board of Examiners for Certified Dental Mechanics. The other route is to enrol in a two-year training program offered by the Northern Alberta Institute of Technology. Upon completion of this diploma program, the graduate is required to apprentice for two years under the supervision of a certified denturist and to complete examinations at four levels. The diploma program produced 14 graduates in 1986-87.

TABLE 3

EDUCATIONAL PROGRAM FOR DENTURISTS IN ALBERTA[1]

	1984-85	1985-86	1986-87
Northern Alberta Institute of Technology (Program Length: 2 years)			
Enrolments:			
1st Year	18	18	18
2nd Year	18	18	18
Graduates:	13	12	14

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[1] Source: *Alberta Health and Social Service Education Programs Inventory, 1986-87*. Edmonton, Alberta: Department of Advanced Education, December 1987.

Dietary Technicians

I. Overview

Definition: Assist in planning and supervising food service programs in governmental, institutional and commercial establishments. Plan menus and diets, under direction of dietitian or nutritionist, to provide required food and nutrients to individuals and groups. Arrange work schedules and assist in supervision of those engaged in preparation and serving of meals. Purchase or requisition food, equipment and other supplies. Maintain food-cost-control and other operational records to assist in improving efficiency and quality of food service system. Inspect storage facilities and work areas to ensure observance of sanitation, safety and security standards. Maintain attendance and personnel records and assist with inventory of supplies and equipment.

(Source: *Canadian Classification and Dictionary of Occupations*. Ottawa, Ontario: Employment and Immigration Canada, 1980)

Since registration with the Alberta Society of Dietary Technicians is not mandatory, the survey of health and social service personnel working in Alberta, conducted on March 31, 1987 by the Alberta Health and Social Services Disciplines Committee, was used as an alternative source of manpower information.

There were 261 dietary technicians practising in Alberta in 1987.[1] Of these, about 61 percent were employed in acute care hospitals, 13 percent in auxiliary hospitals and 14 percent in nursing homes[2]. Dietary technicians employed in the Census Metropolitan Areas of Calgary and Edmonton accounted for 57 percent of the total. The provincial dietary technician-to-population ratio was 1:9,120 in 1987.

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[1] Source: "Health and Social Service Personnel Working in Alberta, March 31, 1987", Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[2] Ibid.

II. Professional Association and Legislation Information

a) Licensing, Registration, or Certification Authority:

None.

b) Professional Association:

Alberta Society of Dietary Technicians
P.O. Box 3791, Station "D" or P.O. Box 2353
Edmonton, Alberta Calgary, Alberta
T5L 4J8 T2P 2M6

President: Ms. Heather Truber

c) Legislation:

There is no legislation regulating dietary technicians in Alberta at present.

III. Personnel Data

TABLE 1

GEOGRAPHIC DISTRIBUTION OF PRACTISING DIETARY TECHNICIANS, ALBERTA, 1987

Census Division (Major Urban Centre)	Number Practising[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	6	56,700	1:9,450
2 (Lethbridge)	14	115,000	1:8,214
3 (Pincher Creek)	2	34,400	1:17,200
4 (Hanna)	1	12,000	1:12,000
5 (Drumheller)	7	38,100	1:5,443
6 (Calgary excluding CMA)	1	42,618	1:42,618
7 (Stettler)	7	40,400	1:5,771
8 (Red Deer)	19	118,400	1:6,232
9 (Rocky Mountain House)	0	16,000	-
10 (Camrose)	9	79,100	1:8,789
11 (Edmonton excluding CMA)	3	24,171	1:8,057
12 (Bonnyville)	4	45,100	1:11,275
13 (Whitecourt)	7	54,400	1:7,771
14 (Hinton)	1	24,800	1:24,800
15 (Banff)	9	23,100	1:2,567
16 (Fort McMurray)	4	48,600	1:12,150
17 (High Level)	3	49,600	1:16,533
18 (Grande Cache)	1	13,300	1:13,300
19 (Grande Prairie)	15	74,300	1:4,953
Census Metropolitan Area (CMA) of Calgary	66	682,782[3]	1:10,345
Census Metropolitan Area (CMA) of Edmonton	82	787,329[3]	1:9,602
PROVINCIAL TOTAL	**261**	**2,380,200**	**1:9,120**

---

[1] Source: "Health and Social Service Personnel Working in Alberta, March 31, 1987", Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[2] Source: "Estimates of Population and Growth by Alberta Census Divisions", Alberta Bureau of Statistics, May 1988.

[3] Source: Alberta Municipal Affairs and Alberta Bureau of Statistics, October 1987.

TABLE 2

SELECTED MANPOWER STATISTICS FOR DIETARY TECHNICIANS IN ALBERTA, 1985, 1986, AND 1987

	1985	1986	1987
Number of Practising Personnel[1]	248	248	261
% Change in Number of Practising Personnel	2.5%	0.0%	5.2%
Population (Alberta)[2]	2,348,500	2,375,300	2,380,200
% Change in Population	0.4%	1.1%	0.2%
Personnel-to-Population Ratios:			
- Alberta	1:9,470	1:9,578	1:9,120

IV. Educational Programs

Both the Northern Alberta Institute of Technology and the Southern Alberta Institute of Technology offer a two-year program to train dietary technicians. The two programs together produced 45 graduates in 1986-87.

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[1] Source: "Health and Social Service Personnel Working in Alberta", March 31, 1985, 1986, 1987, Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[2] Source: "Alberta Population Growth, Fourth Quarter, 1987", Alberta Bureau of Statistics, March 1988.

TABLE 3

EDUCATIONAL PROGRAMS FOR DIETARY TECHNICIANS IN ALBERTA[1]

	1984-85	1985-86	1986-87
Northern Alberta Institute of Technology (Program Length: 2 years)			
Enrolments:			
1st Year	25	25	26
2nd Year	25	25	19
Graduates:	23	22	17
Southern Alberta Institute of Technology (Program Length: 2 years)			
Enrolments:			
1st Year	37	42	42
2nd Year	20	28	31
Graduates:	17	23	28
PROVINCIAL TOTAL Number of Training Programs: 2			
Graduates:	40	45	45

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[1] Source: *Alberta Health and Social Service Education Programs Inventory, 1986-87*. Edmonton, Alberta: Department of Advanced Education, December 1987.

Dietitians/Nutritionists

I. Overview

Definition: Dietitians

Plan and supervise food service programs in governmental, institutional and commercial establishments to provide nutritionally adequate quality food. Plan diets and menus and evaluate clients' acceptance. Plan and submit budget and manage and control operating costs. Establish and maintain standards of food production and service, sanitation, safety and security. Supervise workers and direct efficient use of personnel and equipment. Institute measures to improve efficiency and quality of food service system. Plan, conduct and evaluate orientation and in-service training programs. Determine food, equipment and supply requirements. Administer established personnel policies. Plan layout designs and determine equipment requirements for new or renovated food services facilities. Prepare material on nutritional value of foods, methods of preparation and recipes, if required.

Nutritionists

Provide consulting services to the community and organize, plan and conduct programs concerning nutrition to assist in promotion of health and prevention of disease. Assess nutritional needs and available resources of community. Develop and implement community programs concerning nutrition. Advise health and other agencies on nutritional and food services standards of their food programs. Counsel individuals and families in nutritional principles, diet, food selection and economical buying practices. Interpret and evaluate current research relating to nutrition and food service systems management to public and to staff. Conduct or participate in in-service education. Plan, conduct and evaluate nutrition education programs for public. Prepare technical publications and publications for the public concerning food and nutrition. Plan, conduct and evaluate dietary studies and participate in studies of diseases with nutrition component. Plan or participate in funding programs and recommend budget. Manage and control financial resources.

(Source: *Canadian Classification and Dictionary of Occupations*. Ottawa, Ontario: Employment and Immigration Canada, 1980)

There were 359 dietitians/nutritionists who resided in Alberta and registered with the Alberta Registered Dietitians Association (A.R.D.A.) in 1987.[1] Not all registered dietitians/nutritionists practise in the health care and social service sector. According to a manpower survey conducted by the Alberta Health and Social Services Disciplines Committee, there were 278 dietitians and nutritionists employed in health and social service agencies and institutions in 1987.[2] Of these, almost 60 percent were employed in acute care hospitals, 14 percent in nursing homes and 10 percent in auxiliary hospitals.[3]

Registered dietitians/nutritionists located in the Census Metropolitan Areas of Calgary and Edmonton accounted for 79 percent of the total. The number of registered dietitians/nutritionists decreased slightly between 1985 and 1987, while the provincial population increased by 1.3 percent during the same period. The registered dietitian/nutritionist-to-population ratio was 1:6,630 in Alberta in 1987.

II. Professional Association and Legislation Information

a) Professional Association/Registration Body:

Alberta Registered Dietitians Association
P.O. Box 3874, Station D
Edmonton, Alberta
T5L 4K1

or

P.O. Box 2208, Station M
Calgary, Alberta
T2P 2M4

President: Ms. Eunice Meakin

b) Legislation:

Although there is no mandatory registration requirement under the Registered Dietitians Act for dietitians/nutritionists in order to practise in the province, only dietitians/nutritionists who are registered with the Alberta Registered Dietitians Association (A.R.D.A.) may use the title of "registered dietitian".

In addition to registration functions, the A.R.D.A. is responsible for regulating the conduct of its members and maintaining professional discipline. The Universities Coordinating Council evaluates the educational qualifications while the professional association evaluates the experiential qualifications required for registration.

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[1] Source: Alberta Registered Dietitians Association. Number of dietitians/nutritionists registered with the A.R.D.A. and residing in Alberta as of April 30, 1987.

[2] Source: "Health and Social Service Personnel Working in Alberta, March 31, 1987", Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[3] Ibid.

III. Personnel Data

TABLE 1

GEOGRAPHIC DISTRIBUTION OF REGISTERED DIETITIANS/NUTRITIONISTS, ALBERTA, 1987

Census Division (Major Urban Centre)	Number Practising[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	5	56,700	1:11,340
2 (Lethbridge)	10	115,000	1:11,500
3 (Pincher Creek)	4	34,400	1:8,600
4 (Hanna)	2	12,000	1:6,000
5 (Drumheller)	1	38,100	1:38,100
6 (Calgary excluding CMA)	5	42,618	1:8,524
7 (Stettler)	1	40,400	1:40,400
8 (Red Deer)	16	118,400	1:7,400
9 (Rocky Mountain House)	0	16,000	-
10 (Camrose)	8	79,100	1:9,888
11 (Edmonton excluding CMA)	2	24,171	1:12,086
12 (Bonnyville)	6	45,100	1:7,517
13 (Whitecourt)	4	54,400	1:13,600
14 (Hinton)	0	24,800	-
15 (Banff)	3	23,100	1:7,700
16 (Fort McMurray)	5	48,600	1:9,720
17 (High Level)	2	49,600	1:24,800
18 (Grande Cache)	0	13,300	-
19 (Grande Prairie)	2	74,300	1:37,150
Census Metropolitan Area (CMA) of Calgary	132	682,782[3]	1:5,173
Census Metropolitan Area (CMA) of Edmonton	151	787,329[3]	1:5,214
PROVINCIAL TOTAL	**359**	**2,380,200**	**1:6,630**

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[1] Source: Alberta Registered Dietitians Association. Number of dietitians/nutritionists registered with the A.R.D.A. and residing in Alberta as of April 30, 1987.

[2] Source: "Estimates of Population and Growth by Alberta Census Divisions", Alberta Bureau of Statistics, May 1988.

[3] Source: Alberta Municipal Affairs and Alberta Bureau of Statistics, October 1987.

TABLE 2

SELECTED MANPOWER STATISTICS FOR DIETITIANS/NUTRITIONISTS IN ALBERTA, 1985, 1986, AND 1987

	1985	1986	1987
Number of Registered Personnel[1]	366	366	359
% Change in Number of Registered Personnel	8.0%	0.0%	-1.9%
Population (Alberta)[2]	2,348,500	2,375,300	2,380,200
% Change in Population	0.4%	1.1%	0.2%
Personnel-to-Population Ratios:			
- Alberta	1:6,417	1:6,490	1:6,630

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[1] Source: Alberta Registered Dietitians Association. Number of dietitians/nutritionists registered with the A.R.D.A. and residing in Alberta as of April 30 of the indicated year.

[2] Source: "Alberta Population Growth, Fourth Quarter, 1987", Alberta Bureau of Statistics, March 1988.

IV. Educational Programs

The Faculty of Home Economics at the University of Alberta offers a four-year baccalaureate degree program with a major in foods and nutrition. The program produced 32 graduates in 1986-87. To qualify as a dietitian, a dietetic internship must also be completed. The University of Alberta also offers separate master's degree programs in both foods and nutrition. There were four graduates from these two programs in 1986-87.

TABLE 3

EDUCATIONAL PROGRAMS FOR
DIETITIANS/NUTRITIONISTS IN ALBERTA[1]

	1984-85	1985-86	1986-87
A. BACCALAUREATE PROGRAM: University of Alberta Home Economics: Foods and Nutrition (Program Length: 4 years)			
Enrolments:			
1st Year	33	33	51
2nd Year	51	41	48
3rd Year	55	51	37
4th Year	33	50	54
Graduates	23	17	32
B. MASTER'S PROGRAM University of Alberta Master of Science in Home Economics: Foods (Program Length: 2 years)			
Enrolments:	4	5	5
Graduates:	1	-	1

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[1] Source: *Alberta Health and Social Service Education Programs Inventory, 1986-87*. Edmonton, Alberta: Department of Advanced Education, December 1987.

TABLE 3 (continued)

	1984-85	1985-86	1986-87
University of Alberta Master of Science in Home Economics: Nutrition (Program Length: 2 years)			
Enrolments:	9	14	9
Graduates:	-	2	3
PROVINCIAL TOTAL Number of M.Sc. Programs: 2			
Graduates:	1	2	4

Emergency Medical Technicians

I. Overview

Definition: An emergency attendant:

> Gives emergency care to sick and injured persons at the scene of an accident or illness and during transport to a hospital. Assists with lifting of patient onto wheeled cart or stretcher and into and out of ambulance. Gives first aid such as mouth-to-mouth resuscitation, cardiac massage, administration of oxygen and application of bandages and splints. Assists with rescue work, if required. Performs duties of ambulance driver if required.
>
> (Source: *Canadian Classification and Dictionary of Occupations*. Ottawa, Ontario: Employment and Immigration Canada, 1980)

Emergency medical technicians - ambulance (EMT-A) are ambulance attendants who have received training to provide emergency services at the basic life support level.[1]

In Alberta, training at the EMT-A level is provided at the Southern Alberta Institute of Technology or at the Alberta Vocational Centre at Lac La Biche.

Emergency medical technicians - paramedic (EMT-P) are ambulance attendants who have received training to provide emergency services at the advanced life support level.[2]

In Alberta, training at the EMT-P level is provided at the Northern Alberta Institute of Technology and the Southern Alberta Institute of Technology.

As of 1986, registration for emergency medical technicians - paramedic and ambulance is set out under the Health Disciplines Act.

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[1] "Basic life support is an emergency first aid procedure that consists of recognizing respiratory and cardiac arrest and starting the proper application of cardiopulmonary resuscitation to maintain life until a victim recovers sufficiently to be transported or until advanced life support is available." (American Heart Association, "Standards for cardiopulmonary resuscitation and emergency cardiac care." *Journal of the American Medical Association*, Vol. 227, No. 7, Supplement; 1974: p. 84).

[2] According to the American Heart Association, advanced life support for the patient in cardiac arrest consists of the following elements: basic life support, use of adjunctive equipment for ventilation and circulation, cardiac monitoring for dysrhythmia recognition and control, defibrillation, establishment and maintenance of an intravenous infusion lifeline, employment of definitive therapy, including drug administration and stabilization of the patient's condition. (See: American Heart Association, "Standards for cardiopulmonary resuscitation and emergency cardiac care." *Journal of the American Medical Association*, Vol. 227, No. 17, Supplement; 1974.)

There were 1,366 emergency medical technicians registered with the Emergency Medical Technicians (Paramedic and Ambulance) Committee in 1987. This is an increase of 35.7 percent over the previous year. Of the total, 995 were classified as ambulance attendants and 371 as paramedics. Emergency medical technicians in the Census Metropolitan Areas of Calgary and Edmonton accounted for 48 percent of the total. The provincial personnel-to-population ratio was 1:1,742.

In Alberta, municipalities have the power to set the level of ambulance services beyond the legislated minimum standard. Some municipalities have established ambulance services at the advanced life support level: Airdrie, Calgary, Edmonton, Fort McMurray, Grande Prairie, High River, Innisfail, Medicine Hat, and St. Albert. This factor partly accounts for the very uneven distribution of emergency medical personnel in Alberta.

II. Professional Association and Legislation Information

a) Licensing, Registration, or Certification Authority:

Emergency Medical Technicians Committee
Professions and Occupations Bureau
9th Floor, John E. Brownlee Building
10365 - 97 Street
Edmonton, Alberta
T5J 3W5

Chairman: Mr. Dan Osborne

b) Professional Association:

Registered Emergency Medical Technicians
Association of Alberta
18429 - 97A Avenue
Edmonton, Alberta
T5T 3L6

President: Mr. Guy L'Abbe

Registered Emergency Paramedics Association of Alberta
P.O. Box 6859, Postal Station "D"
Calgary, Alberta
T2P 2E9

President: Mr. Ed Moffat

c) Legislation:

There are several statutes which set standards for ambulance services and ambulance attendants.

The Motor Transport Act requires that every "Class A ambulance" in the province be staffed by at least one qualified attendant who at the minimum holds a St. John's Ambulance Certificate.

The Municipal Government Act allows municipalities to provide ambulance services which exceed the minimum standards set forth in the Motor Transport Act. Some municipalities have passed ambulance service regulations under this Act.

The Health Disciplines Act sets educational standards for individuals who practise in a discipline regulated under the Act. Emergency medical technicians, both ambulance and paramedic, have been regulated under this Act since December 31, 1985. The Emergency Medical Technicians Committee, established under the Act, is responsible for registration of members. The titles "emergency medical technician - ambulance" and "emergency medical technician - paramedic" are reserved for registered members. In addition, the Act provides a mechanism to hear complaints against a registered member and discipline those whose skill, judgement or conduct is unacceptable, or those who contravene the legislation.

III. Personnel Data

TABLE 1A
GEOGRAPHIC DISTRIBUTION OF REGISTERED EMERGENCY MEDICAL TECHNICIANS, ALBERTA, 1987

Census Division (Major Urban Centre)	Number Practising[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	21	56,700	1:2,700
2 (Lethbridge)	95	115,000	1:1,211
3 (Pincher Creek)	24	34,400	1:1,433
4 (Hanna)	15	12,000	1:800
5 (Drumheller)	27	38,100	1:1,411
6 (Calgary excluding CMA)	42	42,618	1:1,015
7 (Stettler)	32	40,400	1:1,263
8 (Red Deer)	112	118,400	1:1,057
9 (Rocky Mountain House)	9	16,000	1:1,778
10 (Camrose)	48	79,100	1:1,648
11 (Edmonton excluding CMA)	11	24,171	1:2,197
12 (Bonnyville)	53	45,100	1:851
13 (Whitecourt)	41	54,400	1:1,327
14 (Hinton)	14	24,800	1:1,771
15 (Banff)	22	23,100	1:1,050
16 (Fort McMurray)	35	48,600	1:1,389
17 (High Level)	15	49,600	1:3,307
18 (Grande Cache)	12	13,300	1:1,108
19 (Grande Prairie)	62	74,300	1:1,198
Census Metropolitan Area (CMA) of Calgary	334	682,782[3]	1:2,044
Census Metropolitan Area (CMA) of Edmonton	327	787,329[3]	1:2,408
Regional Location Unknown	15		
PROVINCIAL TOTAL	**1,366**	**2,380,200**	**1:1,742**

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[1] Source: Emergency Medical Technicians Committee (Paramedic & Ambulance).

[2] Source: "Estimates of Population and Growth by Alberta Census Divisions", Alberta Bureau of Statistics, May 1988.

[3] Source: Alberta Municipal Affairs and Alberta Bureau of Statistics, October 1987.

TABLE 1B

COMMUNITY BREAKDOWN OF EMERGENCY MEDICAL TECHNICIANS, ALBERTA, 1987

Community by Population Size	Number Practising[1]	Population[2]	Personnel-to-Population Ratio
Over 60,000			
Census Metropolitan Area (CMA) of Calgary	334	682,782[3]	1:2,044
Census Metropolitan Area (CMA) of Edmonton	327	787,329[3]	1:2,408
Between 10,000 and 60,000			
Camrose	13	12,968	1:998
Fort McMurray	23	34,949	1:1,520
Grande Prairie	17	26,471	1:1,557
Lethbridge	75	60,610	1:808
Lloydminster	3	10,201	1:3,400
Medicine Hat	21	41,804	1:1,991
Red Deer	67	54,309	1:811
Wetaskiwin	2	10,103	1:5,052
Between 5,000 and 10,000			
Bonnyville	19	5,575	1:293
Brooks	11	9,464	1:860
Crowsnest Pass	3	6,912	1:2,304
Drumheller	7	6,366	1:909
Edson	5	7,323	1:1,465
High River	13	5,096	1:392
Hinton	8	8,629	1:1,079
Innisfail	14	5,513	1:394
Lacombe	11	6,080	1:553
Okotoks	8	5,522	1:690
Peace River	4	6,355	1:1,589
Ponoka	7	5,473	1:782
Rocky Mountain House	5	5,261	1:1,052
Slave Lake	8	5,538	1:692
St. Paul	9	5,128	1:570
Stettler	8	5,147	1:643
Taber	1	6,382	1:6,382
Vegreville	9	5,276	1:586
Whitecourt	4	5,737	1:1,434
Under 5,000	315	541,897	1:1,720
Regional Location Unknown	15		
PROVINCIAL TOTAL	**1,366**	**2,380,200[4]**	**1:1,742**

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[1] Source: Emergency Medical Technicians Committee (Paramedic & Ambulance).

[2] Source: "Official Population List", Municipal Services Branch, Alberta Municipal Affairs, September 1987.

[3] Source: Alberta Municipal Affairs and Alberta Bureau of Statistics, October 1987.

[4] Source: "Alberta Population Growth, Fourth Quarter, 1987", Alberta Bureau of Statistics, March 1988.

TABLE 2

SELECTED MANPOWER STATISTICS FOR EMERGENCY MEDICAL TECHNICIANS IN ALBERTA, 1985, 1986, AND 1987

	1985	1986	1987
Number of Registered or Practising Personnel	994[1]	1,007[2]	1,366[2]
% Change in Number of Registered or Practising Personnel	10.2%	N/A[3]	5.7%
Population (Alberta)[4]	2,348,500	2,375,300	2,380,200
% Change in Population	0.4%	1.1%	0.2%
Personnel-to-Population Ratios:			
- Alberta	1:2,363	1:2,359	1:1,742

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[1] Source: "Health and Social Service Personnel Working in Alberta, March 31, 1985", Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[2] Source: Emergency Medical Technicians Committee, Paramedic and Ambulance. Note: Since the source of information for 1986 (and 1987) is different from the source for 1985, the data for 1986 and 1985 are not comparable.

[3] Since 1985 data refers to practising personnel and 1986 data to registered personnel, the figures are not comparable.

[4] Source: "Alberta Population Growth, Fourth Quarter, 1987", Alberta Bureau of Statistics, March 1988.

IV. Educational Programs

Both the Southern Alberta Institute of Technology and the Northern Alberta Institute of Technology offer a two-year diploma program in emergency medical technology - paramedic. The two programs produced 39 graduates in 1986-87. Alberta Vocational Centre - Lac La Biche and the Southern Alberta Institute of Technology each offer a program (of varying lengths) in emergency medical technology - ambulance. The two programs produced 313 graduates in 1986-87.

TABLE 3A

EDUCATIONAL PROGRAMS FOR EMERGENCY MEDICAL TECHNICIANS (PARAMEDIC) IN ALBERTA[1]

	1984-85	1985-86	1986-87
Northern Alberta Institute of Technology (Program Length: 2 years)			
Enrolments:			
1st Year	19	20	20
2nd Year	18	15	14
Graduates:	14	14	17
Southern Alberta Institute of Technology (Program Length: 2 years)			
Enrolments:			
1st Year	29	30	30
2nd Year	29	26	30
Graduates:	26	24	22
PROVINCIAL TOTAL Number of Training Programs: 2			
Graduates:	40	38	39

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[1] Source: *Alberta Health and Social Service Education Programs Inventory*, 1986-87. Edmonton, Alberta: Department of Advanced Education, December 1987.

TABLE 3B

EDUCATIONAL PROGRAMS FOR EMERGENCY MEDICAL TECHNICIANS (AMBULANCE) IN ALBERTA[1]

	1984-85	1985-86	1986-87
Alberta Vocational Centre - Lac La Biche (Program Length: 200 hours)			
Enrolments: 1st Year	184	145	236
Graduates:	148	121	186
Southern Alberta Institute of Technology (Program Length: 300 hours)			
Enrolments: 1st Year	458	457	398
Graduates:	179	69	127
PROVINCIAL TOTAL Number of Training Programs: 2			
Graduates:	327	190	313

---

[1] Source: *Alberta Health and Social Service Education Programs Inventory*, 1986-87. Edmonton, Alberta: Department of Advanced Education, December 1987.

Health Record Administrators

I. Overview

Definition: Compile and maintain medical records and statistics of hospital and clinic patients. Review clinical records for completeness and contact medical personnel to obtain missing data. Code, index and file records of diagnoses, diseases and treatments. Compile statistics such as reports on admissions, births, deaths, transfers and discharges. Release medical information to staff and authorized government agencies, insurance companies, physicians, hospitals and medical information and research centres. May brief and transcribe records. May testify in court to authenticate medical records.

(Source: *Canadian Classification and Dictionary of Occupations.* Ottawa, Ontario: Employment and Immigration Canada, 1980)

Since registration with the Alberta Health Record Association is not mandatory, the survey of health and social service personnel working in Alberta, conducted on March 31, 1987 by the Alberta Health and Social Services Disciplines Committee, was used as an alternative source of manpower information.

There were 149 health record administrators practising in Alberta in 1987.[1] Almost 75 percent of these individuals were employed in acute care hospitals.[2] Health record administrators employed in the Census Metropolitan Areas of Calgary and Edmonton accounted for almost half of the total. The provincial health record administrator-to-population ratio was 1:15,974 in 1987.

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[1] Source: "Health and Social Service Personnel Working in Alberta, March 31, 1987", Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[2] Ibid.

II. Professional Association and Legislation Information

a) Licensing, Registration, or Certification Authority:

None.

b) Professional Association:

Alberta Health Record Association
P.O. Box 1752
Edmonton, Alberta
T5J 2P1

President: Ms. Judy Arthurs
President Elect: Ms. Roseanne Rostaing

c) Legislation:

At present, there is no legislation regulating health record administrators in Alberta. However, the professional association has applied for designation under the Health Disciplines Act.

III. Personnel Data

TABLE 1

GEOGRAPHIC DISTRIBUTION OF HEALTH RECORD ADMINISTRATORS, ALBERTA, 1987

Census Division (Major Urban Centre)	Number Practising[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	1	56,700	1:56,700
2 (Lethbridge)	6	115,000	1:19,167
3 (Pincher Creek)	1	34,400	1:34,400
4 (Hanna)	3	12,000	1:4,000
5 (Drumheller)	2	38,100	1:19,050
6 (Calgary excluding CMA)	2	42,618	1:21,309
7 (Stettler)	4	40,400	1:10,100
8 (Red Deer)	13	118,400	1:9,108
9 (Rocky Mountain House)	1	16,000	1:16,000
10 (Camrose)	11	79,100	1:7,191
11 (Edmonton excluding CMA)	2	24,171	1:12,086
12 (Bonnyville)	3	45,100	1:15,033
13 (Whitecourt)	6	54,400	1:9,067
14 (Hinton)	3	24,800	1:8,267
15 (Banff)	1	23,100	1:23,100
16 (Fort McMurray)	8	48,600	1:6,075
17 (High Level)	3	49,600	1:16,533
18 (Grande Cache)	0	13,300	-
19 (Grande Prairie)	7	74,300	1:10,614
Census Metropolitan Area (CMA) of Calgary	24	682,782[3]	1:28,449
Census Metropolitan Area (CMA) of Edmonton	48	787,329[3]	1:16,403
PROVINCIAL TOTAL	**149**	**2,380,200**	**1:15,974**

---

[1] Source: "Health and Social Service Personnel Working in Alberta, March 31, 1987", Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[2] Source: "Estimates of Population and Growth by Alberta Census Divisions", Alberta Bureau of Statistics, May 1988.

[3] Source: Alberta Municipal Affairs and Alberta Bureau of Statistics, October 1987.

TABLE 2

SELECTED MANPOWER STATISTICS FOR HEALTH RECORD ADMINISTRATORS IN ALBERTA, 1985, 1986 AND 1987

	1985	1986	1987
Number of Practising Personnel[1]	142	145	149
% Change in Number of Practising Personnel	-12.3%	2.1%	2.8%
Population (Alberta)[2]	2,348,500	2,375,300	2,380,200
% Change in Population	0.4%	1.1%	0.2%
Personnel-to-Population Ratio:			
- Alberta	1:16,539	1:16,381	1:15,974

IV. Educational Programs

The Northern Alberta Institute of Technology offers a two-year health records administrator diploma program. The program produced 12 graduates in 1986-87.

TABLE 3

EDUCATIONAL PROGRAM FOR HEALTH RECORD ADMINISTRATORS IN ALBERTA[3]

	1984-85	1985-86	1986-87
Northern Alberta Institute of Technology (Program Length: 2 years)			
Enrolments:			
1st Year	16	16	16
2nd Year	10	16	13
Graduates:	14	16	12

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[1] Source: "Health and Social Service Personnel Working in Alberta", March 31, 1985, 1986, 1987, Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[2] Source: "Alberta Population Growth, Fourth Quarter, 1987", Alberta Bureau of Statistics, March 1988.

[3] Source: *Alberta Health and Social Service Education Programs Inventory, 1986-87*. Edmonton, Alberta: Department of Advanced Education, December 1987.

Health Record Technicians

I. Overview

Definition: Assist health record administrators, carry out many technical activities within the medical record department, typing medical information, preparing statistical reports, reviewing medical records, supervising clerical personnel, working with doctors, nurses and other health professionals on medical research projects.

(Source: *Health Manpower Provincial Report, Manitoba, 1982*. Winnipeg, Manitoba: Manitoba Department of Health, 1982)

Since registration with the Alberta Health Record Association is not mandatory, the survey of health and social service personnel working in Alberta, conducted on March 31, 1987 by the Alberta Health and Social Services Disciplines Committee, was used as an alternative source of manpower information.

There were 293 health record technicians practising in Alberta in 1987.[1] Of these, 77 percent were employed in acute care hospitals.[2] Health record technicians employed in the Census Metropolitan Areas of Calgary and Edmonton accounted for almost half of the total. The provincial health record technician-to-population ratio was 1:8,124 in 1987.

II. Professional Association and Legislation Information

a) Licensing, Registration, or Certification Authority:

None.

b) Professional Association:

Alberta Health Record Association
P.O. Box 1752
Edmonton, Alberta
T5J 2P1

President: Ms. Judy Arthurs
President Elect: Ms. Roseanne Rostaing

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[1] Source: "Health and Social Service Personnel Working in Alberta, March 31, 1987", Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[2] Ibid.

c) Legislation:

At present, there is no legislation regulating health record technicians in Alberta. However, the professional association has applied for designation and regulation under the Health Disciplines Act.

III. Personnel Data

TABLE 1

GEOGRAPHIC DISTRIBUTION OF PRACTISING HEALTH RECORD TECHNICIANS, ALBERTA, 1987

Census Division (Major Urban Centre)	Number Practising[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	3	56,700	1:18,900
2 (Lethbridge)	13	115,000	1:8,846
3 (Pincher Creek)	8	34,400	1:4,300
4 (Hanna)	4	12,000	1:3,000
5 (Drumheller)	7	38,100	1:5,443
6 (Calgary excluding CMA)	7	42,618	1:6,088
7 (Stettler)	11	40,400	1:3,673
8 (Red Deer)	24	118,400	1:4,933
9 (Rocky Mountain House)	4	16,000	1:4,000
10 (Camrose)	18	79,100	1:4,394
11 (Edmonton excluding CMA)	2	24,171	1:12,086
12 (Bonnyville)	7	45,100	1:6,443
13 (Whitecourt)	8	54,400	1:6,800
14 (Hinton)	2	24,800	1:12,400
15 (Banff)	7	23,100	1:3,300
16 (Fort McMurray)	8	48,600	1:6,075
17 (High Level)	4	49,600	1:12,400
18 (Grande Cache)	4	13,300	1:3,325
19 (Grande Prairie)	10	74,300	1:7,430
Census Metropolitan Area (CMA) of Calgary	70	682,782[3]	1:9,754
Census Metropolitan Area (CMA) of Edmonton	72	787,329[3]	1:10,935
PROVINCIAL TOTAL	**293**	**2,380,200**	**1:8,124**

---

[1] Source: "Health and Social Service Personnel Working in Alberta, March 31, 1987", Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[2] Source: "Estimates of Population and Growth by Alberta Census Divisions", Alberta Bureau of Statistics, May 1988.

[3] Source: Alberta Municipal Affairs and Alberta Bureau of Statistics, October 1987.

TABLE 2

SELECTED MANPOWER STATISTICS FOR HEALTH RECORD TECHNICIANS IN ALBERTA, 1985, 1986, AND 1987

	1985	1986	1987
Number of Practising Personnel[1]	303	279	293
% Change in Number of Practising Personnel	12.2%	-7.9%	5.0%
Population (Alberta)[2]	2,348,500	2,375,300	2,380,200
% Change in Population	0.4%	1.1%	0.2%
Personnel-to-Population Ratio:			
- Alberta	1: 7,751	1: 8,514	1: 8,124

IV. Educational Programs

The Southern Alberta Institute of Technology (S.A.I.T.) offers a 12-month health record technicians certificate program. The program produced 16 graduates in 1986-87.

TABLE 3

EDUCATIONAL PROGRAM FOR HEALTH RECORD TECHNICIANS IN ALBERTA[3]

	1984-85	1985-86	1986-87
Southern Alberta Institute of Technology (Program Length: 12 months)			
Enrolments:	19	25	25
Graduates:	11	12	16

---

[1] Source: "Health and Social Service Personnel Working in Alberta", March 31, 1985, 1986, 1987, Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[2] Source: "Alberta Population Growth, Fourth Quarter, 1987", Alberta Bureau of Statistics, March 1988.

[3] Source: *1986-87 Alberta Health and Social Service Education Programs Inventory*. Edmonton, Alberta: Department of Advanced Education, December 1987.

Medical Laboratory Technologists

I. Overview

Definition: Perform medical laboratory tests, procedures, experiments and analyses for the diagnosis, treatment and prevention of disease. Conduct chemical analysis of blood, urine, cerebro-spinal and other body fluids to ascertain normal and abnormal constituents. Study blood cells, their numbers, morphological characteristics and coagulation factors related to various physiological and pathological conditions. Prepare tissue sections for microscopic examination using fixation, imbedding, cutting and staining techniques to demonstrate special cellular tissue elements or other characteristics. Study micro-organisms which cause disease and their effect upon the human body, using a variety of microscopic and macroscopic techniques. Perform blood group, type and compatibility tests for transfusion purposes. Investigate responses of body to foreign cells or agents.

(Source: *Canadian Classification and Dictionary of Occupations*. Ottawa, Ontario: Employment and Immigration Canada, 1980)

Since registration with the Alberta branch of the Canadian Society of Laboratory Technologists is not mandatory, the survey of health and social service personnel working in Alberta, conducted on March 31, 1987 by the Alberta Health and Social Services Disciplines Committee, was used as an alternative source of manpower information.

There were 2,294 medical laboratory technologists practising in Alberta in 1987.[1] About half of these individuals were employed in acute care hospitals and almost 40 percent in medical laboratories and x-ray facilities.[2] Medical laboratory technologists employed in the Census Metropolitan Areas of Calgary and Edmonton accounted for 81 percent of the total. The provincial medical laboratory technologist-to-population ratio was 1:1,038 in 1987.

Some of the basic laboratory services provided by medical laboratory technologists are provided by combined laboratory and x-ray technicians, especially in small rural hospitals (see chapter on Combined Laboratory and X-Ray Technicians).

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[1] Source: "Health and Social Service Personnel Working in Alberta, March 31, 1987", Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[2] Ibid.

II. Professional Association and Legislation Information

a) Licensing, Registration, or Certification Authority:

None.

b) Professional Association:

Alberta Society of Medical Laboratory Technologists
Box 4165
Edmonton, Alberta
T6E 4T2

President: Ms. Carol Andreachuk
President Elect: Ms. Bonnie Reib

c) Legislation:

There is no legislation regulating medical laboratory technologists in Alberta at present. However, the professional association has applied for designation under the Health Disciplines Act.

III. Personnel Data

TABLE 1A

GEOGRAPHIC DISTRIBUTION OF PRACTISING MEDICAL LABORATORY TECHNOLOGISTS, ALBERTA, 1987

Census Division (Major Urban Centre)	Number Practising[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	44	56,700	1:1,289
2 (Lethbridge)	87	115,000	1:1,322
3 (Pincher Creek)	12	34,400	1:2,867
4 (Hanna)	1	12,000	1:12,000
5 (Drumheller)	14	38,100	1:2,721
6 (Calgary excluding CMA)	16	42,618	1:2,664
7 (Stettler)	22	40,400	1:1,836
8 (Red Deer)	36	118,400	1:3,289
9 (Rocky Mountain House)	3	16,000	1:5,333
10 (Camrose)	43	79,100	1:1,840
11 (Edmonton excluding CMA)	10	24,171	1:2,417
12 (Bonnyville)	13	45,100	1:3,469
13 (Whitecourt)	14	54,400	1:3,886
14 (Hinton)	8	24,800	1:3,100
15 (Banff)	17	23,100	1:1,359
16 (Fort McMurray)	26	48,600	1:1,869
17 (High Level)	9	49,600	1:5,511
18 (Grande Cache)	4	13,300	1:3,325
19 (Grande Prairie)	51	74,300	1:1,457
Census Metropolitan Area (CMA) of Calgary	808	682,782[3]	1: 845
Census Metropolitan Area (CMA) of Edmonton	1,056	787,329[3]	1:746
PROVINCIAL TOTAL	**2,294**	**2,380,200**	**1:1,038**

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[1] Source: "Health and Social Service Personnel Working in Alberta, March 31, 1987", Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[2] Source: "Estimates of Population and Growth by Alberta Census Divisions", Alberta Bureau of Statistics, May 1988.

[3] Source: Alberta Municipal Affairs and Alberta Bureau of Statistics, October 1987.

TABLE 1B

COMMUNITY BREAKDOWN OF MEDICAL LABORATORY TECHNOLOGISTS, ALBERTA, 1987

Community by Population Size	Number Practising[1]	Population[2]	Personnel-to-Population Ratio
Over 60,000			
Census Metropolitan Area (CMA) of Calgary	808	682,782[3]	1:845
Census Metropolitan Area (CMA) of Edmonton	1,056	787,329[3]	1:746
Between 10,000 and 60,000			
Camrose	13	12,968	1:998
Fort McMurray	18	34,949	1:1,942
Grande Prairie	32	26,471	1:827
Lethbridge	73	60,610	1:830
Lloydminster	10	10,201	1:1,020
Medicine Hat	42	41,804	1:995
Red Deer	25	54,309	1:2,172
Wetaskiwin	10	10,103	1:1,010
Between 5,000 and 10,000			
Bonnyville	5	5,575	1:1,115
Brooks	7	9,464	1:1,352
Crowsnest Pass	4	6,912	1:1,728
Drumheller	9	6,366	1:707
Edson	5	7,323	1:1,465
High River	6	5,096	1:849
Hinton	3	8,629	1:2,876
Innisfail	0	5,513	-
Lacombe	5	6,080	1:1,216
Okotoks	0	5,522	-
Peace River	11	6,355	1:578
Ponoka	3	5,473	1:1,824
Rocky Mountain House	3	5,261	1:1,754
Slave Lake	2	5,538	1:2,769
St. Paul	4	5,128	1:1,282
Stettler	5	5,147	1:1,029
Taber	6	6,382	1:1,064
Vegreville	6	5,276	1:879
Whitecourt	2	5,737	1:2,869
Under 5,000	121	541,897	1:4,478
PROVINCIAL TOTAL	**2,294**	**2,380,200[4]**	**1:1,038**

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[1] Source: "Health and Social Service Personnel Working in Alberta, March 31, 1987", Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[2] Source: "Official Population List", Municipal Services Branch, Alberta Municipal Affairs, September 1987.

[3] Source: Alberta Municipal Affairs and Alberta Bureau of Statistics, October 1987.

[4] Source: "Alberta Population Growth, Fourth Quarter, 1987", Alberta Bureau of Statistics, March 1988.

TABLE 2

SELECTED MANPOWER STATISTICS FOR MEDICAL LABORATORY TECHNOLOGISTS IN ALBERTA, 1985, 1986, AND 1987

	1985	1986	1987
Number of Practising Personnel[1]	2,135	2,207	2,294
% Change in Number of Practising Personnel	9.1%	3.4%	3.9%
Population (Alberta)[2]	2,348,500	2,375,300	2,380,200
% Change in Population	0.4%	1.1%	0.2%
Personnel-to-Population Ratios:			
- Alberta	1: 1,100	1: 1,076	1: 1,038

IV. Educational Programs

Both the Northern Alberta Institute of Technology and the Southern Alberta Institute of Technology, in cooperation with a number of hospitals in Edmonton, Calgary, Red Deer and Lethbridge, offer a two-year medical laboratory technology diploma program. Together, the two programs produced 108 graduates in 1986-87. In addition, the University of Alberta offers a four-year bachelor of science program in medical laboratory science. The program produced 22 graduates in 1986-87.

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[1] Source: "Health and Social Service Personnel Working in Alberta", March 31, 1985, 1986, 1987, Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[2] Source: "Alberta Population Growth, Fourth Quarter, 1987", Alberta Bureau of Statistics, March 1988.

TABLE 3

EDUCATIONAL PROGRAMS FOR MEDICAL LABORATORY TECHNOLOGISTS IN ALBERTA[1]

	1984-85	1985-86	1986-87
A. DIPLOMA PROGRAMS			
Northern Alberta Institute of Technology			
(Program Length: 2 years)			
Enrolments:			
1st Year	75	74	70
2nd Year	64	59	67
Graduates:	63	59	67
Southern Alberta Institute of Technology			
(Program Length: 2 years)			
Enrolments:			
1st Year	46	52	54
2nd Year	34	40	50
Graduates:	31	37	41
PROVINCIAL TOTAL			
Number of Diploma Programs: 2			
Graduates:	94	96	108
B. BACCALAUREATE PROGRAM			
University of Alberta			
(Program Length: 4 years)			
Enrolments:			
1st Year	36	36	35
2nd Year	27	28	25
3rd Year	22	22	21
4th Year	15	21	22
Graduates:	15	21	22

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[1] Source: *Alberta Health and Social Service Education Programs Inventory, 1986-87*. Edmonton, Alberta: Department of Advanced Education, December 1987.

Medical Radiation Technologists

I. Overview

Definition: Radiographic Technologists

Operate radiography equipment to produce pictures of body structures for diagnostic purposes. Explain treatment and reassure patients. Prepare drugs and chemicals for radiologist. Position patient according to part of body being x-rayed. Affix shields to protect unaffected areas of patient from radiation. Adjust equipment controls to collimate beam, to regulate length and intensity of x-ray exposure and to expose film. Process and prepare films for interpretation by radiologist. Assist radiologist in fluoroscopy, cinefluoroscopy and other diagnostic procedures. Operate radiography equipment in operating theatre or other specialized area to assist physician or surgeon.

Radiation Oncology Technologists

Administer radiation treatment to patients as prescribed by radiation oncologist. Explain treatment and reassure patients. Position patient according to part of body being treated. Affix shields to protect unaffected areas of patient from radiation. Adjust equipment controls to collimate beam. Observe patient through window or on closed circuit television during treatment. Notify radiation oncologist if medical problems arise. Assist clinical physicist to prepare patient's treatment plan according to radiation oncologist's prescription. Process or assist in preparation of sealed radioactive substances for surface application or insertion into body cavities.

Nuclear Medicine Technologists

Prepare radioactive solutions and reagents and operate scanning equipment for diagnostic purposes. Perform assays and quality-control tests on radioactive materials. Calculate doses to be administered by physician. Position patient and calibrate scanning equipment. Operate radiation-scanning equipment to produce photographic image of irradiated area. Calculate blood volume and red-cell survival, using geiger counter, electroscope, scaler, scintillation and position scanner and scintogram.

Monitor oscilloscope images and study photographic images to determine if further scanning is required. Perform radioisotope scanning of pathological specimens and blood samples.

(Source: *Canadian Classification and Dictionary of Occupations*. Ottawa, Ontario: Employment and Immigration Canada, 1980)

As of January 1, 1986, regulations for medical radiation technologists under the Health Disciplines Act have been in effect. The Medical Radiation Technologists Committee, established under the Act, has been responsible for registration. Effective February, 1988, the functions of this Committee have been transferred to the professional association.

There were 1,074 medical radiation technologists registered with the Medical Radiation Technologists Committee in 1987. Of these, 938 were radiographic technologists, 71 were nuclear medicine technologists and 65 were radiation oncology technologists.[1] Medical radiation technologists in the Census Metropolitan Areas of Calgary and Edmonton accounted for 72 percent of the total. The provincial personnel-to-population ratio was 1:2,216.

Some of the basic x-ray services performed by medical radiation technologists are provided by combined laboratory and x-ray technicians, especially in small rural hospitals (see chapter on Combined Laboratory and X-Ray Technicians).

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[1] Source: Medical Radiation Technologists Committee.

II. Professional Association and Legislation Information

a) Licensing, Registration, or Certification Authority:

Medical Radiation Technologists Committee
Professions and Occupations Bureau
9th Floor, John E. Brownlee Building
10365 - 97 Street
Edmonton, Alberta
T5J 3W7

Chairman: Mr. Ian Fleming

b) Professional Association:

Alberta Association of Medical Radiation Technologists
Room 202A, 2204 - 5th Avenue North
Lethbridge, Alberta
T1H 0N7

President: Mrs. Deanna Siewert

c) Legislation:

Regulations under the Health Disciplines Act set educational standards for registration of medical radiation technologists. These regulations also reserve the titles "medical radiation technologist", "nuclear medicine technologist", "radiation oncology technologist" and "radiographic technologist" for individuals registered under the Act. In addition, the Act provides a mechanism to deal with complaints regarding the skill, judgement or conduct of a registered member, or contravention of the legislation.

The Medical Radiation Technologists Committee, established under the Act, has been responsible for registration and investigation of complaints. In February 1988, this responsibility was transferred to the professional association, the Alberta Association of Medical Radiation Technologists.

III. Personnel Data

TABLE 1A

GEOGRAPHIC DISTRIBUTION OF REGISTERED MEDICAL RADIATION TECHNOLOGISTS, ALBERTA, 1987

Census Division (Major Urban Centre)	Number Practising[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	16	56,700	1:3,544
2 (Lethbridge)	52	115,000	1:2,212
3 (Pincher Creek)	12	34,400	1:2,867
4 (Hanna)	3	12,000	1:4,000
5 (Drumheller)	11	38,100	1:3,464
6 (Calgary excluding CMA)	17	42,618	1:2,507
7 (Stettler)	13	40,400	1:3,108
8 (Red Deer)	38	118,400	1:3,116
9 (Rocky Mountain House)	3	16,000	1:5,333
10 (Camrose)	26	79,100	1:3,042
11 (Edmonton excluding CMA)	10	24,171	1:2,417
12 (Bonnyville)	14	45,100	1:3,221
13 (Whitecourt)	12	54,400	1:4,533
14 (Hinton)	3	24,800	1:8,267
15 (Banff)	7	23,100	1:3,300
16 (Fort McMurray)	17	48,600	1:2,859
17 (High Level)	10	49,600	1:4,960
18 (Grande Cache)	5	13,300	1:2,660
19 (Grande Prairie)	36	74,300	1:2,064
Census Metropolitan Area (CMA) of Calgary	299	682,782[3]	1:2,284
Census Metropolitan Area (CMA) of Edmonton	470	787,329[3]	1:1,675
PROVINCIAL TOTAL	**1,074**	**2,380,200**	**1:2,216**

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[1] Source: "Health and Social Service Personnel Working in Alberta, March 31, 1987", Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[2] Source: "Estimates of Population and Growth by Alberta Census Divisions", Alberta Bureau of Statistics, May 1988.

[3] Source: Alberta Municipal Affairs and Alberta Bureau of Statistics, October 1987.

TABLE 1B

COMMUNITY BREAKDOWN OF MEDICAL RADIATION TECHNOLOGISTS, ALBERTA, 1987

Community by Population Size	Number Practising[1]	Population[2]	Personnel-to-Population Ratio
Over 60,000			
Census Metropolitan Area (CMA) of Calgary	299	682,782[3]	1:2,284
Census Metropolitan Area (CMA) of Edmonton	470	787,329[3]	1:1,675
Between 10,000 and 60,000			
Camrose	5	12,968	1:2,594
Fort McMurray	14	34,949	1:2,496
Grande Prairie	20	26,471	1:1,324
Lethbridge	34	60,610	1:1,783
Lloydminster	4	10,201	1:2,550
Medicine Hat	16	41,804	1:2,613
Red Deer	29	54,309	1:1,873
Wetaskiwin	8	10,103	1:1,263
Between 5,000 and 10,000			
Bonnyville	2	5,575	1:2,788
Brooks	6	9,464	1:1,577
Crowsnest Pass	2	6,912	1:3,456
Drumheller	4	6,366	1:1,592
Edson	0	7,323	-
High River	6	5,096	1:849
Hinton	3	8,629	1:2,876
Innisfail	2	5,513	1:2,757
Lacombe	1	6,080	1:6,080
Okotoks	2	5,522	1:2,761
Peace River	3	6,355	1:2,118
Ponoka	2	5,473	1:2,737
Rocky Mountain House	2	5,261	1:2,631
Slave Lake	2	5,538	1:2,769
St. Paul	3	5,128	1:1,709
Stettler	5	5,147	1:1,029
Taber	5	6,382	1:1,276
Vegreville	2	5,276	1:2,638
Whitecourt	3	5,737	1:1,912
Under 5,000	120	541,897	1:4,516
PROVINCIAL TOTAL	**1,074**	**2,380,200[4]**	**1:2,216**

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[1] Source: "Health and Social Service Personnel Working in Alberta, March 31, 1987", Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[2] Source: "Official Population List", Municipal Services Branch, Alberta Municipal Affairs, September 1987.

[3] Source: Alberta Municipal Affairs and Alberta Bureau of Statistics, October 1987.

[4] Source: "Alberta Population Growth, Fourth Quarter, 1987", Alberta Bureau of Statistics, March 1988.

TABLE 2

SELECTED MANPOWER STATISTICS FOR MEDICAL RADIATION TECHNOLOGISTS IN ALBERTA 1985, 1986, AND 1987

	1985	1986	1987
Number of Practising Personnel	926[1]	1,089[2]	1,074[2]
% Change in Number of Practising Personnel	10.2%	N/A	-1.4%
Population (Alberta)[3]	2,348,500	2,375,300	2,380,200
% Change in Population	0.4%	1.1%	0.2%
Personnel-to-Population Ratios:			
- Alberta	1:2,536	1: 2,181	1:2,216

IV. Educational Programs

Medical radiation technologists are trained in one of three areas: radiography (medical x-ray technology), radiation therapy (oncology), and nuclear medical technology.

Radiography: Seven training hospitals in Calgary, Edmonton, and Red Deer, in conjunction with the Northern Alberta Institute of Technology, offer a two-year medical x-ray technology diploma program. There were 57 graduates in 1986-87.

Radiation Therapy: A 27-month program is offered at the Cross Cancer Institute in Edmonton and the Tom Baker Cancer Centre in Calgary. These programs produced three graduates in 1986-87.

Nuclear Medical Technology: A two-year program is offered by the Southern Alberta Institute of Technology in conjunction with the University of Alberta Hospitals in Edmonton and the Foothills Hospital in Calgary. The program produced 14 graduates in 1986-87.

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[1] Source: "Health and Social Service Personnel Working in Alberta, March 31, 1985", Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[2] Source: Medical Radiation Technologists Committee. Note: Since the source of information for 1986 (and 1987) is different from the source for 1985, the data for 1986 and 1985 are not comparable.

[3] Source: "Alberta Population Growth, Fourth Quarter, 1987", Alberta Bureau of Statistics, March 1988.

TABLE 3

EDUCATIONAL PROGRAMS FOR MEDICAL RADIATION TECHNOLOGISTS IN ALBERTA[1]

	1984-85	1985-86	1986-87
A. PROGRAM IN MEDICAL X-RAY TECHNOLOGY			
Northern Alberta Institute of Technology			
(Program Length: 2 years)			
Enrolments:			
1st Year	60	48	48
2nd Year	56	59	48
Graduates:	55	54	57
B. PROGRAMS IN RADIATION ONCOLOGY			
Cross Cancer Institute			
(Program Length: 27 months)			
Enrolments:			
1st Year	3	5	6
2nd Year	1	3	4
Graduates:	3	1	3
Tom Baker Cancer Centre			
(Program Length: 27 months)			
Enrolments:			
1st Year	3	3	4
2nd Year	4	-	2
Graduates:	3	4	-
PROVINCIAL TOTAL			
Number of Programs in Radiation Oncology: 2			
Graduates:	6	5	3

---

[1] Source: *Alberta Health and Social Service Education Programs Inventory, 1986-87*. Edmonton, Alberta: Department of Advanced Education, December 1987.

TABLE 3 (continued)

	1984-85	1985-86	1986-87
C. PROGRAM IN NUCLEAR MEDICAL TECHNOLOGY			
Southern Alberta Institute of Technology			
(Program Length: 2 years)			
Enrolments:			
1st Year	16	16	16
2nd Year	13	11	14
Graduates:	9	10	14

Occupational Hygiene Technologists

I. Overview

Definition: Under the supervision of an occupational hygienist, studies, evaluates and conducts a health program to control those environmental factors or stresses arising in a work situation which may cause sickness, injury or significant discomfort and inefficiency among workers. Collects, measures and analyzes samples of dust, gases, vapors and other potentially toxic materials to determine adherence to prescribed standards. Investigates adequacy of ventilation, exhaust equipment, lighting and other conditions which may affect employee health. Performs sound-level evaluations to determine relationship of noise to employee discomfort and efficiency. Collaborates with other scientists and engineers to institute control and correction of hazards. Participates in education meetings to instruct employees in matters pertaining to occupational health.

(Source: Department of Community and Occupational Health, Government of Alberta)

Since registration with the Alberta section of the American Industrial Hygiene Association is not mandatory, the survey of health and social service personnel working in Alberta, conducted on March 31, 1987 by the Alberta Health and Social Services Disciplines Committee, was used as an alternative source of manpower information.

There were 113 occupational hygiene technologists practising in Alberta in 1987.[1] Occupational hygiene technologists employed in the Census Metropolitan Areas of Calgary and Edmonton accounted for 76 percent of the total. The provincial occupational hygiene technologist-to-population ratio was 1:21,064 in 1987.

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[1] Source: "Health and Social Service Personnel Working in Alberta, March 31, 1987", Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

II. Professional Association and Legislation Information

a) Licensing, Registration, or Certification Authority:

None.

b) Professional Association:

American Industrial Hygiene Association
(Alberta Section)
P.O. Box 1803, Station "M"
Calgary, Alberta
T2P 2L8

President: Mr. W. Lawson

c) Legislation:

There is no legislation regulating occupational hygiene technologists in Alberta at present.

III. Personnel Data

TABLE 1

GEOGRAPHIC DISTRIBUTION OF PRACTISING OCCUPATIONAL HYGIENE TECHNOLOGISTS, ALBERTA, 1987

Census Division (Major Urban Centre)	Number Practising[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	7	56,700	1:8,100
2 (Lethbridge)	3	115,000	1:38,333
3 (Pincher Creek)	0	34,400	-
4 (Hanna)	0	12,000	-
5 (Drumheller)	0	38,100	-
6 (Calgary excluding CMA)	0	42,618	-
7 (Stettler)	0	40,400	-
8 (Red Deer)	6	118,400	1:19,733
9 (Rocky Mountain House)	0	16,000	-
10 (Camrose)	1	79,100	1:79,100
11 (Edmonton excluding CMA)	0	24,171	-
12 (Bonnyville)	0	45,100	-
13 (Whitecourt)	0	54,400	-
14 (Hinton)	3	24,800	1:8,267
15 (Banff)	0	23,100	-
16 (Fort McMurray)	4	48,600	1:12,150
17 (High Level)	0	49,600	-
18 (Grande Cache)	0	13,300	-
19 (Grande Prairie)	3	74,300	1:24,767
Census Metropolitan Area (CMA) of Calgary	36	682,782[3]	1:18,966
Census Metropolitan Area (CMA) of Edmonton	50	787,329[3]	1:15,747
PROVINCIAL TOTAL	**113**	**2,380,200**	**1:21,064**

---

[1] Source: "Health and Social Service Personnel Working in Alberta, March 31, 1987", Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[2] Source: "Estimates of Population and Growth by Alberta Census Divisions", Alberta Bureau of Statistics, May 1988.

[3] Source: Alberta Municipal Affairs and Alberta Bureau of Statistics, October 1987.

TABLE 2

SELECTED MANPOWER STATISTICS FOR OCCUPATIONAL HYGIENE TECHNOLOGISTS IN ALBERTA, 1985, 1986 AND 1987

	1985	1986	1987
Number of Practising Personnel[1]	88	92	113
% Change in Number of Practising Personnel	31.3%	4.5%	22.8%
Population (Alberta)[2]	2,348,500	2,375,300	2,380.200
% Change in Population	0.4%	1.1%	0.2%
Personnel-to-Population Ratios:			
- Alberta	1:26,875	1:25,818	1:21,064

IV. Educational Programs

Mount Royal College offers an occupational hygiene diploma for occupational hygiene technologists. The program produced three graduates in 1986-87.

TABLE 3

EDUCATIONAL PROGRAM FOR OCCUPATIONAL HYGIENE TECHNOLOGISTS IN ALBERTA[3]

	1984-85	1985-86	1986-87
Mount Royal Community College (Program Length: 2 years)			
Enrolments:			
1st year	12	11	12
2nd year	-	11	6
Graduates:	-	5	3

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[1] Source: "Health and Social Service Personnel Working in Alberta", March 31, 1985, 1986, 1987, Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[2] Source: "Alberta Population Growth, Fourth Quarter, 1987", Alberta Bureau of Statistics, March 1988.

[3] Source: *Alberta Health and Social Services Education Programs Inventory, 1986-87*. Edmonton, Alberta: Department of Advanced Education, December 1987.

Occupational Therapists

I. Overview

Definition: Plan and carry out treatment programs based on activities such as work, education and recreation to rehabilitate physically and mentally disabled persons. Administer tests and observe patients to assess their emotional, mental and physical capacities. Plan and direct programs in manual and creative arts, industrial and vocational skills, recreational activities, remedial games, cultural and educational interests and play activities for children. Conduct group programs to assist patients in building self-confidence and in adjusting to family and community. Train handicapped patients in self-care and daily living activities. Advise and instruct patients on specially adapted household equipment and furnishings. Assess patient's vocational potential and provide work adjustment and actual work experience. Participate in testing and training of patients with perceptual motor problems and provide training for children with learning disabilities. Record patient's activities, response and progress. Attend meetings of rehabilitation team and seminars, workshops and courses on occupational therapy. Supervise and instruct occupational therapy students and auxiliary personnel assigned to department.

(Source: *Canadian Classification and Dictionary of Occupations.* Ottawa, Ontario: Employment and Immigration Canada, 1980)

Since registration with the Alberta Association of Registered Occupational Therapists is not mandatory, the survey of health and social service personnel working in Alberta, conducted on March 31, 1987 by the Alberta Health and Social Services Disciplines Committee, was used as an alternative source of manpower information.

There were 348 occupational therapists practising in Alberta in 1987.[1] Of these, approximately 48 percent were employed in acute care hospitals, 18 percent in auxiliary hospitals, 9 percent in health units, 8 percent in nursing homes and 6 percent by school boards and in schools for the handicapped.[2] Occupational therapists employed in the Census Metropolitan Areas of Calgary and Edmonton accounted for 80 percent of the total. The provincial occupational therapist-to-population ratio was 1:6,840 in 1987.

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[1] Source: "Health and Social Service Personnel Working in Alberta, March 31, 1987", Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[2] Ibid.

II. Professional Association and Legislation Information

a) Licensing, Registration, or Certification Authority:

None.

b) Professional Association:

Alberta Association of Registered
Occupational Therapists
300, 5241 - Calgary Trail Southbound N.W.
Edmonton, Alberta
T6H 5G8

Registrar: Ms. Betty Lou Smathers
President: Ms. Heather Chilton

c) Legislation:

The Occupational Therapy Profession Act received royal assent at the 1987 spring session of the Alberta Legislature. Regulations are currently being drafted and once approved, the statute will be proclaimed, probably in late 1988 or early 1989. This legislation will set out the educational requirements, reserve titles and provide a mechanism for the review of complaints.

III. Personnel Data

TABLE 1

GEOGRAPHIC DISTRIBUTION OF PRACTISING OCCUPATIONAL THERAPISTS, ALBERTA, 1987

Census Division (Major Urban Centre)	Number Practising[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	6	56,700	1:9,450
2 (Lethbridge)	9	115,000	1:12,778
3 (Pincher Creek)	0	34,400	-
4 (Hanna)	0	12,000	-
5 (Drumheller)	1	38,100	1:38,100
6 (Calgary excluding CMA)	4	42,618	1:10,655
7 (Stettler)	1	40,400	1:40,400
8 (Red Deer)	22	118,400	1:5,382
9 (Rocky Mountain House)	0	16,000	-
10 (Camrose)	2	79,100	1:39,550
11 (Edmonton excluding CMA)	1	24,171	1:24,171
12 (Bonnyville)	3	45,100	1:15,033
13 (Whitecourt)	2	54,400	1:27,200
14 (Hinton)	0	24,800	-
15 (Banff)	4	23,100	1:5,775
16 (Fort McMurray)	2	48,600	1:24,300
17 (High Level)	1	49,600	1:49,600
18 (Grande Cache)	0	13,300	-
19 (Grande Prairie)	12	74,300	1:6,192
Census Metropolitan Area (CMA) of Calgary	109	682,782[3]	1:6,264
Census Metropolitan Area (CMA) of Edmonton	169	787,329[3]	1:4,659
PROVINCIAL TOTAL	**348**	**2,380,200**	**1:6,840**

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[1] Source: "Health and Social Service Personnel Working in Alberta, March 31, 1987", Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[2] Source: "Estimates of Population and Growth by Alberta Census Divisions", Alberta Bureau of Statistics, May 1988.

[3] Source: Alberta Municipal Affairs and Alberta Bureau of Statistics, October 1987.

TABLE 2

SELECTED MANPOWER STATISTICS FOR OCCUPATIONAL THERAPISTS IN ALBERTA, 1985, 1986, AND 1987

	1985	1986	1987
Number of Practising Personnel[1]	296	330	348
% Change in Number of Practising Personnel	N/A	11.5%	5.5%
Population (Alberta)[2]	2,348,500	2,375,300	2,380,200
% Change in Population	0.4%	1.1%	0.2%
Personnel-to-Population Ratios:			
- Alberta	1:7,934	1:7,198	1:6,840
- Western Canada[3]	1:7,933	-	-

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[1] Source: "Health and Social Service Personnel Working in Alberta", March 31, 1985, 1986, 1987, Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[2] Source: "Alberta Population Growth, Fourth Quarter, 1987", Alberta Bureau of Statistics, March 1988.

[3] Sources: (i) *Rollcall 85*. Vancouver, British Columbia: Division of Health Services Research and Development, University of British Columbia, March 1986. (ii) Health Services Commission, Research and Planning, Manitoba Health, Winnipeg, Manitoba. (iii) Policy Research and Management Services, Saskatchewan Health, Regina, Saskatchewan. (iv) Survey of employers conducted by the Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

IV. Educational Programs

A four-year bachelor of science program in occupational therapy is offered at the University of Alberta. The program produced 47 graduates in 1986-87. Under an interprovincial training agreement, five training places per year are reserved for Saskatchewan students in this program.

In addition, a two-year master of science program in occupational therapy commenced at the University of Alberta in 1986-87.

TABLE 3

EDUCATIONAL PROGRAMS FOR OCCUPATIONAL THERAPISTS IN ALBERTA[1]

	1984-85	1985-86	1986-87
A. **BACCALAUREATE PROGRAM** University of Alberta (Program Length: 4 years)			
Enrolments:			
1st Year	Pre-Professional Year	Pre-Professional Year	Pre-Professional Year
2nd Year	40	40	42
3rd Year	44	40	75
4th Year	51	53	54
Graduates:	39	45	47
B. **MASTER'S PROGRAM** University of Alberta Master of Science in Occupational Therapy. (Program Length: 2 years)			
Enrolments:	-	-	3
Graduates:	-	-	-

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[1] Source: *Alberta Health and Social Service Education Programs Inventory, 1986-87*. Edmonton, Alberta: Department of Advanced Education, December 1987.

Ophthalmic Dispensers

I. Overview

Definition: An ophthalmic dispenser supplies, prepares, or dispenses ophthalmic appliances; interprets prescriptions from ophthalmologists or optometrists in respect of ophthalmic appliances; fits, adjusts and adapts ophthalmic appliances to the needs of the intended wearer in accordance with a prescription from an ophthalmologist or optometrist, or without a prescription where lenses are duplicated with no change in their refractive value.

(Source: The Ophthalmic Dispensers Act, RSA 1980)

There were 359 ophthalmic dispensers who resided in Alberta and registered with the Alberta Guild of Ophthalmic Dispensers in 1987.[1] Ophthalmic dispensers located in the Census Metropolitan Areas of Calgary and Edmonton accounted for 79 percent of the total. The number of ophthalmic dispensers registered in Alberta grew by 12 percent between 1985 and 1987, while the provincial population increased by 1.3 percent during the same period. The provincial ophthalmic dispenser-to-population ratio was 1:6,630 in 1987.

Most of the services provided by ophthalmic dispensers are also provided by optometrists (see chapter on Optometrists).

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[1] Source: Alberta Guild of Ophthalmic Dispensers. Number of ophthalmic dispensers registered with the Alberta Guild of Ophthalmic Dispensers and residing in Alberta as of December 31, 1987.

II. Professional Association and Legislation Information

a) Certification Authority:

Ophthalmic Dispensers Examining Board
c/o Professions and Occupations Bureau
9th Floor, John E. Brownlee Building
10365 - 97 Street
Edmonton, Alberta
T5J 3W7

Chairman: Dr. Henry Wyatt

b) Professional Association:

Alberta Guild of Ophthalmic Dispensers
1135, 10830 Jasper Avenue
Edmonton, Alberta
T5J 2B3

Registrar: Ms. Judy Klassen
President: Mr. Murray Scambler

c) Legislation:

Under the authority of the Ophthalmic Dispensers Act, all individuals who wish to practise as ophthalmic dispensers must apply for and receive a certificate of competency from the Ophthalmic Dispensers Examining Board, a provincial government certification body. The Board sets the educational qualifications and examinations required for obtaining a certificate of competency, or a special certificate of competency in dispensing contact lenses, in order to be registered. The titles "ophthalmic dispenser", "registered ophthalmic dispenser" and "optical dispenser" are reserved for registered members.

Successful applicants must register with the Alberta Guild of Ophthalmic Dispensers, the professional association. The Alberta Guild of Ophthalmic Dispensers is responsible for regulating the conduct of its members and for maintaining professional discipline.

III. Personnel Data

TABLE 1

GEOGRAPHIC DISTRIBUTION OF OPHTHALMIC DISPENSERS, ALBERTA, 1987

Census Division (Major Urban Centre)	Number Practising[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	11	56,700	1:5,155
2 (Lethbridge)	18	115,000	1:6,389
3 (Pincher Creek)	0	34,400	-
4 (Hanna)	0	12,000	-
5 (Drumheller)	1	38,100	1:38,100
6 (Calgary excluding CMA)	3	42,618	1:14,206
7 (Stettler)	2	40,400	1:20,200
8 (Red Deer)	15	118,400	1:7,893
9 (Rocky Mountain House)	1	16,000	1:16,000
10 (Camrose)	5	79,100	1:15,820
11 (Edmonton excluding CMA)	3	24,171	1:8,057
12 (Bonnyville)	2	45,100	1:22,550
13 (Whitecourt)	1	54,400	1:54,400
14 (Hinton)	1	24,800	1:24,800
15 (Banff)	0	23,100	-
16 (Fort McMurray)	4	48,600	1:12,150
17 (High Level)	1	49,600	1:49,600
18 (Grande Cache)	0	13,300	-
19 (Grande Prairie)	7	74,300	1:10,614
Census Metropolitan Area (CMA) of Calgary	119	682,782[3]	1:5,738
Census Metropolitan Area (CMA) of Edmonton	165	787,329[3]	1:4,772
PROVINCIAL TOTAL	**359**	**2,380,200**	**1:6,630**

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[1] Source: Alberta Guild of Ophthalmic Dispensers. Number of ophthalmic dispensers registered with the Alberta Guild of Ophthalmic Dispensers and residing in Alberta as of December 31, 1987.

[2] Source: "Estimates of Population and Growth by Alberta Census Divisions", Alberta Bureau of Statistics, May 1988.

[3] Source: Alberta Municipal Affairs and Alberta Bureau of Statistics, October 1987.

TABLE 2

SELECTED MANPOWER STATISTICS FOR OPHTHALMIC DISPENSERS IN ALBERTA, 1985, 1986, AND 1987

	1985	1986	1987
Number of Registered Personnel[1]	321	340	359
% Change in Number of Registered Personnel	9.9%	5.9%	5.6%
Population (Alberta)[2]	2,348,500	2,375,300	2,380,200
% Change in Population	0.4%	1.1%	0.2%
Personnel-to-Population Ratios:			
- Alberta	1:7,316	1:6,986	1:6,630

IV. Educational Programs

Since 1986, the Northern Alberta Institute of Technology has offered programs for two levels of ophthalmic dispensing: eyeglasses and contact lenses. Individuals enrolled in the courses must serve a two-year apprenticeship in an optical laboratory or dispensary concurrent with their studies. Each course is two years in length and consists of independent study plus lectures in Edmonton and Calgary. The course in eyeglasses is a pre-requisite for the one in contact lenses. Following these courses, individuals must write the examination of the Ophthalmic Dispensers Examining Board. In May 1987, there were 38 graduates from the course in eyeglasses and 5 from the course in contact lenses.

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[1] Source: Alberta Guild of Ophthalmic Dispensers. Number of ophthalmic dispensers registered with the Alberta Guild of Ophthalmic Dispensers and residing in Alberta as of December 31 of the indicated year.

[2] Source: "Alberta Population Growth, Fourth Quarter, 1987", Alberta Bureau of Statistics, March 1988.

TABLE 3

EDUCATIONAL PROGRAMS FOR OPHTHALMIC DISPENSERS IN ALBERTA

	1984-85	1985-86	1986-87
Northern Alberta Institute of Technology Eyeglass Dispensing (Program Length: 2 years) Independent Study			
Enrolments:			
1st Year	-	-	86
2nd Year	-	-	42
Graduates:	-	-	38
Northern Alberta Institute of Technology Contact Lens Dispensing (Program Length: 2 years) Independent Study			
Enrolments:			
1st Year	-	-	4
2nd Year	-	-	5
Graduates:	-	-	5
PROVINCIAL TOTAL Number of Training Programs: 2			
Graduates:	-	-	43

Optometrists

I. Overview

Definition: A person engaged in the practice of optometry.

"Practice of optometry" means:

(i) the examination of the human eye, its related structures and the human vision system in order to measure, assess, diagnose or refer for consultation or treatment any condition of the human eye, its related structures and the human vision system;

(ii) the treatment of conditions of the human eye, its related structures and the human vision system, through the prescribing and dispensing of ophthalmic appliances or other aids, the prescribing and provision of orthoptics or perceptual training and the offering of advice, consultation or counselling.

(Source: Optometry Profession Act, S.A. 1983, Ch. 0-16)

There were 212 optometrists who resided in Alberta and registered with the Alberta Association of Optometrists (A.A.O.) in 1987.[1] Optometrists located in the Census Metropolitan Areas of Calgary and Edmonton accounted for 63 percent of the total. Some optometrists in the larger urban centres operate satellite offices in neighboring rural areas and smaller centres throughout the province. Some of the services provided by optometrists, such as the dispensing of ophthalmic appliances, can also be provided by ophthalmic dispensers (see chapter on Ophthalmic Dispensers). The provincial optometrist-to-population ratio was 1:11,227 in 1987.

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[1] Source: Alberta Association of Optometrists. Number of optometrists registered with the A.A.O. and residing in Alberta as of December 31, 1987. Excludes honorary, inactive, and retired members.

II. Professional Association and Legislation Information

a) Professional Association/Registration Authority:

Alberta Association of Optometrists
No. 1, The Professional Centre
9333 - 50 Street
Edmonton, Alberta
T6B 2L5

Executive Director: Mr. R. Glenn Campbell
President: Dr. Graham W. Dawdy
President Elect: Dr. Larry W. Gies

b) Legislation:

Under the authority of the Optometry Profession Act, all individuals who wish to practise as optometrists and use this title must apply for registration with the Alberta Association of Optometrists (A.A.O.). The academic qualifications required for registration are set out in regulation. The Universities Coordinating Council evaluates educational qualifications and prescribes examinations for registration.

Besides registration, the A.A.O. is also responsible for discipline and practice review.

III. Personnel Data

TABLE 1A

GEOGRAPHIC DISTRIBUTION OF REGISTERED OPTOMETRISTS, ALBERTA, 1987

Census Division (Major Urban Centre)	Number Practising[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	5	56,700	1:11,340
2 (Lethbridge)	15	115,000	1:7,667
3 (Pincher Creek)	2	34,400	1:17,200
4 (Hanna)	2	12,000	1:6,000
5 (Drumheller)	0	38,100	-
6 (Calgary excluding CMA)	3	42,618	1:14,206
7 (Stettler)	2	40,400	1:20,200
8 (Red Deer)	22	118,400	1:5,382
9 (Rocky Mountain House)	0	16,000	-
10 (Camrose)	4	79,100	1:19,775
11 (Edmonton excluding CMA)	2	24,171	1:12,086
12 (Bonnyville)	4	45,100	1:11,275
13 (Whitecourt)	5	54,400	1:10,880
14 (Hinton)	1	24,800	1:24,800
15 (Banff)	2	23,100	1:11,550
16 (Fort McMurray)	2	48,600	1:24,300
17 (High Level)	2	49,600	1:24,800
18 (Grande Cache)	0	13,300	-
19 (Grande Prairie)	5	74,300	1:14,860
Census Metropolitan Area (CMA) of Calgary	64	682,782[3]	1:10,668
Census Metropolitan Area (CMA) of Edmonton	70	787,329[3]	1:11,248
PROVINCIAL TOTAL	**212**	**2,380,200**	**1:11,227**

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[1] Source: Alberta Association of Optometrists. Number of optometrists registered with the A.A.O. and residing in Alberta as of December 31, 1987. Excludes honorary, inactive, and retired members.

[2] Source: "Estimates of Population and Growth by Alberta Census Divisions", Alberta Bureau of Statistics, May 1988.

[3] Source: Alberta Municipal Affairs and Alberta Bureau of Statistics, October 1987.

TABLE 1B

COMMUNITY BREAKDOWN OF REGISTERED OPTOMETRISTS, ALBERTA, 1987

Community by Population Size	Number Practising[1]	Population[2]	Personnel-to-Population Ratio
Over 60,000			
Census Metropolitan Area (CMA) of Calgary	64	682,782[3]	1:10,668
Census Metropolitan Area (CMA) of Edmonton	70	787,329[3]	1:11,248
Between 10,000 and 60,000			
Camrose	3	12,968	1:4,323
Fort McMurray	2	34,949	1:17,475
Grande Prairie	4	26,471	1:6,618
Lethbridge	13	60,610	1:4,662
Lloydminster	2	10,201	1:5,101
Medicine Hat	5	41,804	1:8,361
Red Deer	15	54,309	1:3,621
Wetaskiwin	3	10,103	1:3,368
Between 5,000 and 10,000			
Bonnyville	1	5,575	1:5,575
Brooks	0	9,464	-
Crowsnest Pass	1	6,912	1:6,912
Drumheller	0	6,366	-
Edson	0	7,323	-
High River	2	5,096	1:2,548
Hinton	1	8,629	1:8,629
Innisfail	0	5,513	-
Lacombe	2	6,080	1:3,040
Okotoks	0	5,522	-
Peace River	1	6,355	1:6,355
Ponoka	3	5,473	1:1,824
Rocky Mountain House	0	5,261	-
Slave Lake	1	5,538	1:5,538
St. Paul	2	5,128	1:2,564
Stettler	1	5,147	1:5,147
Taber	1	6,382	1:6,382
Vegreville	1	5,276	1:5,276
Whitecourt	2	5,737	1:2,869
Under 5,000	12	541,897	1:41,684
PROVINCIAL TOTAL	**212**	**2,380,200[4]**	**1:11,227**

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[1] Source: Alberta Association of Optometrists. Number of optometrists registered with the A.A.O. and residing in Alberta as of December 31, 1987. Excludes honorary, inactive, and retired members.

[2] Source: "Official Population List", Municipal Services Branch, Alberta Municipal Affairs, September 1987.

[3] Source: Alberta Municipal Affairs and Alberta Bureau of Statistics, October 1987.

[4] Source: "Alberta Population Growth, Fourth Quarter, 1987", Alberta Bureau of Statistics, March 1988.

TABLE 2

SELECTED MANPOWER STATISTICS FOR OPTOMETRISTS IN ALBERTA, 1985, 1986, AND 1987

	1985	1986	1987
Number of Registered Personnel[1]	210	211	212
% Change in Number of Registered Personnel	12.3%	0.5%	0.5%
Population (Alberta)[2]	2,348,500	2,375,300	2,380,200
% Change in Population	0.4%	1.1%	0.2%
Personnel-to-Population Ratios:			
- Alberta	1:11,183	1:11,257	1:11,227
- Western Canada[3]	1:12,297	-	-

IV. Educational Programs

There is no training program for optometrists in Alberta. However, Alberta, Saskatchewan, and Manitoba have had an inter-provincial training agreement with the School of Optometry at the University of Waterloo and the Government of Ontario since 1976. Under this agreement, the three western provinces annually purchase 13 training places (seven places for Alberta; three places for Saskatchewan; and three places for Manitoba) in the four-year program.

In August 1986, the agreement with the University of Waterloo and the Government of Ontario was renewed for a further five-year period. Pre-requisite for admission into the School of Optometry is two years of pre-optometry training (or equivalent courses in the sciences, including physics, mathematics, biology, zoology, chemistry, and psychology). In 1987, Alberta had a total of 26 students enrolled in the four-year training program at the University of Waterloo under the current agreement. Ten students graduated in 1986-87.

In addition to the University of Waterloo, a program in optometry is offered in French at the University of Montreal. The Western provinces have no inter-provincial training agreements with the University of Montreal.

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[1] Source: Alberta Association of Optometrists. Number of optometrists registered with the A.A.O. and residing in Alberta as of December 31 of the indicated year. Excludes honorary, inactive, and retired members.

[2] Source: "Alberta Population Growth, Fourth Quarter, 1987", Alberta Bureau of Statistics, March 1988.

[3] Sources: (i) *Rollcall 85*. Vancouver, British Columbia: Division of Health Services Research and Development, University of British Columbia, March 1986. (ii) Health Services Commission, Research and Planning, Manitoba Health, Winnipeg, Manitoba. (iii) Policy Research and Manage ment Services, Saskatchewan Health, Regina, Saskatchewan. (iv) Survey of professional associations conducted by the Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta. All figures refer to optometrists registered with their respective provincial professional associations.

Pharmacists

I. Overview

Definition: Compound and dispense prescribed pharmaceuticals and related preparations. Prepare or supervise preparation of liquid medicines, ointments, powders, pills and other medications. Check prescriptions for overdoses and drug interactions. Weigh, measure and mix drugs and other medicinal compounds and fill bottles and capsules with correct quantity and composition of preparation. Store and preserve biologicals, vaccines, serums and other drugs to prevent deterioration. Dispense medical and surgical products for internal and external use as prescribed. Maintain patient medication profiles and record prescriptions dispensed and poisons and narcotics issued. Order and maintain stock of pharmaceutical supplies. Provide information on uses and effects of medicaments. Sell non-prescription drugs, sick-room supplies, toiletries, cosmetics, lotions and other commercial products.

(Source: *Canadian Classification and Dictionary of Occupations*. Ottawa, Ontario: Employment and Immigration Canada, 1980)

There were 1,980 pharmacists who resided in Alberta and registered with the Alberta Pharmaceutical Association (A.P.A.) in 1987.[1] Of these, 1,667 or 84 percent practised in community pharmacies while most of the remaining 16 percent were employed in hospital settings.[2] Pharmacists located in the Census Metropolitan Areas of Calgary and Edmonton accounted for 67 percent of the total. The number of pharmacists registered in Alberta grew by 5.3 percent between 1985 and 1987 while the provincial population increased by 1.3 percent during the same period. The provincial pharmacist-to-population ratio was 1:1,202 in 1987.

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[1] Source: Alberta Pharmaceutical Association. Number of pharmacists registered with the A.P.A. and residing in Alberta as of December 31, 1987. Excludes inactive, honorary, and retired members.

[2] Ibid.

II. Professional Association and Legislation Information

a) Professional Association/Licensing Body:

Alberta Pharmaceutical Association
10615 - 124 Street
Edmonton, Alberta
T5N 1S5

Registrar-Treasurer: Mr. Larry J. Shipka
President: Mr. Ronald D. Schuster
President Elect: Ms. Margo E. Ward

b) Legislation:

Under the authority of the Pharmaceutical Association Act, all individuals who wish to practise as pharmacists must register with the Alberta Pharmaceutical Association (A.P.A.).

The Alberta Pharmaceutical Association is also responsible for regulating the conduct of its members and for maintaining discipline. The Pharmaceutical Association Act sets the educational qualifications required for registration with the A.P.A.

A new Pharmaceutical Profession Act was passed at the 1988 spring session of the legislature.

III. Personnel Data

TABLE 1A

GEOGRAPHIC DISTRIBUTION OF REGISTERED PHARMACISTS, ALBERTA, 1987

Census Division (Major Urban Centre)	Number Practising[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	50	56,700	1:1,134
2 (Lethbridge)	92	115,000	1:1,250
3 (Pincher Creek)	25	34,400	1:1,376
4 (Hanna)	9	12,000	1:1,333
5 (Drumheller)	28	38,100	1:1,361
6 (Calgary excluding CMA)	30	42,618	1:1,421
7 (Stettler)	26	40,400	1:1,554
8 (Red Deer)	112	118,400	1:1,057
9 (Rocky Mountain House)	7	16,000	1:2,286
10 (Camrose)	64	79,100	1:1,236
11 (Edmonton excluding CMA)	18	24,171	1:1,343
12 (Bonnyville)	32	45,100	1:1,409
13 (Whitecourt)	40	54,400	1:1,360
14 (Hinton)	16	24,800	1:1,550
15 (Banff)	19	23,100	1:1,216
16 (Fort McMurray)	24	48,600	1:2,025
17 (High Level)	13	49,600	1:3,815
18 (Grande Cache)	4	13,300	1:3,325
19 (Grande Prairie)	54	74,300	1:1,376
Census Metropolitan Area (CMA) of Calgary	559	682,782[3]	1:1,221
Census Metropolitan Area (CMA) of Edmonton	758	787,329[3]	1:1,039
PROVINCIAL TOTAL	**1,980**	**2,380,200**	**1:1,202**

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[1] Source: Alberta Pharmaceutical Association. Number of pharmacists registered with the A.P.A. and residing in Alberta as of December 31, 1987. Excludes inactive, honorary and retired members.

[2] Source: "Estimates of Population and Growth by Alberta Census Divisions", Alberta Bureau of Statistics, May 1988.

[3] Source: Alberta Municipal Affairs and Alberta Bureau of Statistics, October 1987.

TABLE 1B

COMMUNITY BREAKDOWN OF PHARMACISTS, ALBERTA, 1987

Community by Population Size	Number Practising[1]	Population[2]	Personnel-to-Population Ratio
Over 60,000			
Census Metropolitan Area (CMA) of Calgary	559	682,782[3]	1:1,221
Census Metropolitan Area (CMA) of Edmonton	758	787,329[3]	1:1,039
Between 10,000 and 60,000			
Camrose	18	12,968	1:720
Fort McMurray	19	34,949	1:1,839
Grande Prairie	27	26,471	1:980
Lethbridge	58	60,610	1:1,045
Lloydminster	8	10,201	1:1,275
Medicine Hat	45	41,804	1:929
Red Deer	61	54,309	1:890
Wetaskiwin	12	10,103	1:842
Between 5,000 and 10,000			
Bonnyville	6	5,575	1:929
Brooks	10	9,464	1:946
Crowsnest Pass	5	6,912	1:1,382
Drumheller	11	6,366	1:579
Edson	7	7,323	1:1,046
High River	6	5,096	1:849
Hinton	7	8,629	1:1,233
Innisfail	10	5,513	1:551
Lacombe	11	6,080	1:553
Okotoks	6	5,522	1:920
Peace River	7	6,355	1:908
Ponoka	12	5,473	1:456
Rocky Mountain House	6	5,261	1:877
Slave Lake	2	5,538	1:2,769
St. Paul	6	5,128	1:855
Stettler	7	5,147	1:735
Taber	8	6,382	1:798
Vegreville	10	5,276	1:528
Whitecourt	5	5,737	1:1,147
Under 5,000	273	541,897	1:1,985
PROVINCIAL TOTAL	**1,980**	**2,380,200[4]**	**1:1,202**

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[1] Source: Alberta Pharmaceutical Association. Number of pharmacists registered with the A.P.A. and residing in Alberta as of December 31, 1987. Excludes inactive, honorary and retired members.

[2] Source: "Official Population List", Municipal Services Branch, Alberta Municipal Affairs, September 1987.

[3] Source: Alberta Municipal Affairs and Alberta Bureau of Statistics, October 1987.

[4] Source: "Alberta Population Growth, Fourth Quarter, 1987", Alberta Bureau of Statistics, March 1988.

TABLE 2

SELECTED MANPOWER STATISTICS FOR PHARMACISTS IN ALBERTA, 1985, 1986, AND 1987

	1985	1986	1987
Number Registered[1]	1,881	1,913	1980
% Change in Number Registered	0.5%	1.7%	3.5%
Population (Alberta)[2]	2,348,500	2,375,300	2,380,200
% Change in Population	0.4%	1.1%	0.2%
Personnel-to-Population Ratios:			
- Alberta	1:1,249	1:1,242	1:1,202
- Western Canada[3]	1:1,295	-	-

IV. Educational Programs

The University of Alberta offers a four-year baccalaureate program in pharmacy. The program produced 77 graduates in 1986-87.

TABLE 3

EDUCATIONAL PROGRAM FOR PHARMACISTS IN ALBERTA[4]

	1984-85	1985-86	1986-87
University of Alberta (Program Length: 4 years)			
Enrolments:			
1st Year	104	102	88
2nd Year	93	117	129
3rd Year	88	91	114
4th Year	60	67	77
Graduates:	60	66	77

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[1] Source: Alberta Pharmaceutical Association. Number of pharmacists registered with the A.P.A. and residing in Alberta as of December 31 of the indicated year. Excludes inactive, honorary, and retired members.

[2] Source: "Alberta Population Growth, Fourth Quarter, 1987", Alberta Bureau of Statistics, March 1988.

[3] Source: (i) *Rollcall 85*. Vancouver, British Columbia: Division of Health Services Research and Development, University of British Columbia, March 1986. (ii) Health Services Commission, Research and Planning, Manitoba Health, Winnipeg, Manitoba. (iii) Policy Research and Manage ment Services, Saskatchewan Health, Regina, Saskatchewan. (iv) Survey of professional associations conducted by the Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[4] Source: *Alberta Health and Social Service Education Programs Inventory, 1986-87*. Edmonton, Alberta: Department of Advanced Education, December 1987.

Pharmacy Assistants

I. Overview

Definition: Assist pharmacist in hospital, industrial or retail pharmacy. Compound and mix ointments, solutions, lotions or other medications, according to specific instructions, under supervision of pharmacist. Pre-package drugs. Label drugs, chemicals or other pharmaceutical preparations. Assist with keeping records of narcotics issued and returned. Count drugs issued, keep inventory and prepare orders for suppliers, as approved by the pharmacist. Unpack and store supplies and verify items received against invoices. Wash and sterilize bottles, beakers and other glassware and utensils. Clean pharmacy work area. Answer inquiries and deliver drug items, if required. Compute charges for narcotics and pharmaceuticals dispensed from pharmacy, if required.

(Source: *Canadian Classification and Dictionary of Occupations*. Ottawa, Ontario: Employment and Immigration Canada, 1980)

Since there is no professional association for pharmacy assistants, the survey of health and social service personnel working in Alberta, conducted on March 31, 1987 by the Alberta Health and Social Services Disciplines Committee, was used as an alternative source of manpower information.

There were 465 pharmacy assistants practising in Alberta in 1987.[1] Of these, approximately 64 percent were employed in community pharmacies and 32 percent in hospital pharmacies.[2] Pharmacy assistants employed in the Census Metropolitan Areas of Calgary and Edmonton accounted for 72 percent of the total. The provincial pharmacy assistant-to-population ratio was 1:5,119 in 1987.

II. Professional Association and Legislation Information

a) Professional Association/Registration Body:

None.

b) Legislation:

There is no legislation regulating pharmacy assistants in Alberta at present.

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[1] Source: "Health and Social Service Personnel Working in Alberta, March 31, 1987", Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[2] Ibid.

III. Personnel Data

TABLE 1

GEOGRAPHIC DISTRIBUTION OF PRACTISING PHARMACY ASSISTANTS, ALBERTA, 1987

Census Division (Major Urban Centre)	Number Practising[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	13	56,700	1:4,362
2 (Lethbridge)	21	115,000	1:5,476
3 (Pincher Creek)	2	34,400	1:17,200
4 (Hanna)	0	12,000	-
5 (Drumheller)	3	38,100	1:12,700
6 (Calgary excluding CMA)	1	42,618	1:42,618
7 (Stettler)	10	40,400	1:4,040
8 (Red Deer)	25	118,400	1:4,736
9 (Rocky Mountain House)	3	16,000	1:5,333
10 (Camrose)	15	79,100	1:5,273
11 (Edmonton excluding CMA)	2	24,171	1:12,086
12 (Bonnyville)	1	45,100	1:45,100
13 (Whitecourt)	1	54,400	1:54,400
14 (Hinton)	3	24,800	1:8,267
15 (Banff)	1	23,100	1:23,100
16 (Fort McMurray)	6	48,600	1:8,100
17 (High Level)	6	49,600	1:8,267
18 (Grande Cache)	0	13,300	-
19 (Grande Prairie)	17	74,300	1:4,371
Census Metropolitan Area (CMA) of Calgary	154	682,782[3]	1:4,434
Census Metropolitan Area (CMA) of Edmonton	181	787,329[3]	1:4,350
PROVINCIAL TOTAL	**465**	**2,380,200**	**1:5,119**

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[1] Source: "Health and Social Service Personnel Working in Alberta, March 31, 1987", Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[2] Source: "Estimates of Population and Growth by Alberta Census Divisions", Alberta Bureau of Statistics, May 1988.

[3] Source: Alberta Municipal Affairs and Alberta Bureau of Statistics, October 1987.

TABLE 2

SELECTED MANPOWER STATISTICS FOR PHARMACY ASSISTANTS IN ALBERTA, 1985, 1986 AND 1987

	1985	1986	1987
Number of Practising Personnel[1]	319	394	465
% Change in Number of Practising Personnel	N/A	23.5%	18.0%
Population (Alberta)[2]	2,348,500	2,375,300	2,380,200
% Change in Population	0.4%	1.1%	0.2%
Personnel-to-Population Ratios:			
- Alberta	1:7,362	1:6,029	1:5,119

IV. Educational Programs

In 1976, a ten-month program leading to a pharmacy technician certificate was established at Red Deer College. The program produced 38 graduates in 1986-87. Before the program was offered, most pharmacy assistants in Alberta were trained on the job.

TABLE 3

EDUCATIONAL PROGRAM FOR PHARMACY ASSISTANTS IN ALBERTA[3]

	1984-85	1985-86	1986-87
Red Deer Community College (Program Length: 10 months)			
Enrolments:	43	42	43
Graduates:	33	36	38

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[1] Source: "Health and Social Service Personnel Working in Alberta", March 31, 1985, 1986, 1987, Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[2] Source: "Alberta Population Growth, Fourth Quarter, 1987", Alberta Bureau of Statistics, March 1988.

[3] Source: *Alberta Health and Social Services Education Programs Inventory, 1986-87*. Edmonton, Alberta: Department of Advanced Education, December 1987.

Physical Therapists

I. Overview

Definition: Plan and carry out programs of physical treatment, in consultation with physicians and other health care workers, to rehabilitate injured or disabled patients. Administer muscle, nerve, joint and functional ability tests to identify physical problems of patient. Assess patient's symptoms and capabilities. Direct and aid patients individually or in groups, in activities designed to assist in muscle restoration and joint mobility. Guide patient in remedial activities involving use of parallel bars, weights, traction and other equipment. Give whirlpool and contrast baths and apply moist packs. Administer treatments using diathermy, ultrasonic and microwave machines, infra-red and ultra-violet lamps, low-voltage generators and other electrotherapeutic equipment. Instruct patients and their families in procedures to be continued at home. Record treatments given and patient's response and progress.

(Source: *Canadian Classification and Dictionary of Occupations*. Ottawa, Ontario: Employment and Immigration Canada, 1980)

There were 1,135 physical therapists who resided in Alberta and registered with the College of Physical Therapists in 1987. According to a survey conducted by the Alberta Health and Social Services Disciplines Committee, close to 40 percent of the practitioners were employed in acute care hospitals while one-third were in private practice.[2] Physical therapists located in the Census Metropolitan Areas of Calgary and Edmonton accounted for 79 percent of the total. The provincial physical therapist-to-population ratio was 1:2,097 in 1987.

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[1] Source: College of Physical Therapists of Alberta. Number of physical therapists registered with the College of Physical Therapists and residing in Alberta as of December 31, 1987. Excludes retired and non-practising members.

[2] Source: "Health and Social Service Personnel Working in Alberta, March 31, 1987", Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

II. Professional Association and Legislation Information

a) Licensing, Registration, or Certification Authority:

College of Physical Therapists of Alberta
#302, 6020 - 104 Street
Edmonton, Alberta
T6J 1A1

Registrar: Ms. JoAnne Horne
President: Mr. David James

b) Professional Association:

Alberta Physiotherapy Association
P.O. Box 4627, Station C
Calgary, Alberta
T2T 5P1

President: Ms. Elizabeth Lee

c) Legislation:

The Physical Therapy Profession Act was proclaimed on September 30, 1985 (except Sec. 3(1)) replacing the Chartered Physiotherapists Act. The Act reserves the titles "physical therapist" or "physio therapist" alone or in combination with other words. Employers may only hire registered members to perform physical therapy services.

The College of Physical Therapists of Alberta is responsible for registration of members, maintaining professional discipline and practice review. The Act sets out the educational requirements for registration. The Universities Coordinating Council evaluates the educational qualifications and determines equivalencies required for registration.

III. Personnel Data

TABLE 1A

GEOGRAPHIC DISTRIBUTION OF REGISTERED PHYSICAL THERAPISTS, ALBERTA, 1987

Census Division (Major Urban Centre)	Number Practising[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	22	56,700	1:2,577
2 (Lethbridge)	32	115,000	1:3,594
3 (Pincher Creek)	10	34,400	1:3,440
4 (Hanna)	2	12,000	1:6,000
5 (Drumheller)	2	38,100	1:19,050
6 (Calgary excluding CMA)	19	42,618	1:2,243
7 (Stettler)	5	40,400	1:8,080
8 (Red Deer)	49	118,400	1:2,416
9 (Rocky Mountain House)	3	16,000	1:5,333
10 (Camrose)	19	79,100	1:4,163
11 (Edmonton excluding CMA)	10	24,171	1:2,417
12 (Bonnyville)	8	45,100	1:5,638
13 (Whitecourt)	11	54,400	1:4,945
14 (Hinton)	5	24,800	1:4,960
15 (Banff)	7	23,100	1:3,300
16 (Fort McMurray)	17	48,600	1:2,859
17 (High Level)	5	49,600	1:9,920
18 (Grande Cache)	2	13,300	1:6,650
19 (Grande Prairie)	16	74,300	1:4,644
Census Metropolitan Area (CMA) of Calgary	392	682,782[3]	1:1,742
Census Metropolitan Area (CMA) of Edmonton	499	787,329[3]	1:1,578
PROVINCIAL TOTAL	**1,135**	**2,380,200**	**1:2,097**

---

[1] Source: College of Physical Therapists of Alberta. Number of physical therapists registered with the College and residing in Alberta as of December 31, 1987. Excludes retired and non-practising members.

[2] Source: "Estimates of Population and Growth by Alberta Census Divisions", Alberta Bureau of Statistics, May 1988.

[3] Source: Alberta Municipal Affairs and Alberta Bureau of Statistics, October 1987.

TABLE 1B

COMMUNITY BREAKDOWN OF PHYSICAL THERAPISTS, ALBERTA, 1987

Community by Population Size	Number Practising[1]	Population[2]	Personnel-to-Population Ratio
Over 60,000			
Census Metropolitan Area (CMA) of Calgary	392	682,782[3]	1:1,742
Census Metropolitan Area (CMA) of Edmonton	499	787,329[3]	1:1,578
Between 10,000 and 60,000			
Camrose	7	12,968	1:1,853
Fort McMurray	16	34,949	1:2,184
Grande Prairie	11	26,471	1:2,406
Lethbridge	24	60,610	1:2,525
Lloydminster	3	10,201	1:3,400
Medicine Hat	21	41,804	1:1,991
Red Deer	33	54,309	1:1,646
Wetaskiwin	5	10,103	1:2,021
Between 5,000 and 10,000			
Bonnyville	1	5,575	1:5,575
Brooks	3	9,464	1:3,155
Crowsnest Pass	0	6,912	-
Drumheller	0	6,366	-
Edson	2	7,323	1:3,662
High River	3	5,096	1:1,699
Hinton	3	8,629	1:2,876
Innisfail	1	5,513	1:5,513
Lacombe	2	6,080	1:3,040
Okotoks	4	5,522	1:1,381
Peace River	3	6,355	1:2,118
Ponoka	4	5,473	1:1,368
Rocky Mountain House	3	5,261	1:1,754
Slave Lake	1	5,538	1:5,538
St. Paul	1	5,128	1:5,128
Stettler	1	5,147	1:5,147
Taber	0	6,382	-
Vegreville	4	5,276	1:1,319
Whitecourt	2	5,737	1:2,869
Under 5,000	86	541,897	1:6,301
PROVINCIAL TOTAL	**1,135**	**2,380,200[4]**	**1:2,097**

---

[1] Source: College of Physical Therapists of Alberta. Number of physical therapists registered with the College and residing in Alberta as of December 31, 1987. Excludes retired and non-practising members.

[2] Source: "Official Population List", Municipal Services Branch, Alberta Municipal Affairs, September 1987.

[3] Source: Alberta Municipal Affairs and Alberta Bureau of Statistics, October 1987.

[4] Source: "Alberta Population Growth, Fourth Quarter, 1987", Alberta Bureau of Statistics, March 1988.

TABLE 2

SELECTED MANPOWER STATISTICS FOR PHYSICAL THERAPISTS IN ALBERTA, 1985, 1986, AND 1987

	1985	1986	1987
Number of Registered Personnel[1]	942	1,043	1,135
% Change in Number of Registered Personnel	N/A[2]	10.7%	8.8%
Population (Alberta)[3]	2,348,500	2,375,300	2,380,200
% Change in Population	0.4%	1.1%	0.2%
Personnel-to-Population Ratios:			
- Alberta	1:2,493	1:2,277	1:2,097

---

[1] Source: College of Physical Therapists of Alberta. Number of physical therapists registered with the College and residing in Alberta as of December 31 of the indicated year. Excludes retired and non-practising members.

[2] Since the 1985 manpower information is from the College of Physical Therapists, and information for previous years is from Alberta Health and Social Services Disciplines Committee surveys of employers, the data are not comparable.

[3] Source: "Alberta Population Growth, Fourth Quarter, 1987", Alberta Bureau of Statistics, March 1988.

IV. Educational Programs

Prior to 1977, the University of Alberta offered a three-year diploma program and a four-year baccalaureate program in physical therapy. Now, only the four-year baccalaureate program is offered. The program produced 48 graduates in 1986-87. In addition, the University of Alberta offers a master's degree program in physical therapy which is approximately two years in length. The program produced one graduate in 1986-87.

TABLE 3

EDUCATIONAL PROGRAMS FOR PHYSICAL THERAPISTS IN ALBERTA[1]

	1984-85	1985-86	1986-87
A. BACCALAUREATE PROGRAM University of Alberta (Program Length: 4 years)			
Enrolments:			
1st Year	46	46	67
2nd Year	43	43	43
3rd Year	40	40	42
4th Year[2]	48	51	57
Graduates:	42	45	48
B. MASTER'S PROGRAM University of Alberta (Program Length: 2 years)			
Enrolments:			
1st Year	1	1	2
2nd Year	3	1	2
3rd Year	4	6	1
Graduates:	3	3	1

---

[1] Source: *Alberta Health and Social Service Education Programs Inventory, 1986-87*. Edmonton, Alberta: Department of Advanced Education, December 1987.

[2] Increases in the fourth year enrolments were due to graduates of the diploma program returning to complete the baccalaureate degree program.

Physicians

I. Overview

Definition: The work of physicians is concerned with preventing, diagnosing and treating human illnesses. Activities include: conducting medical examinations, making diagnoses, prescribing and giving treatment for diseases, disorders and injuries of the human body and applying preventive medicine as well as rehabilitative techniques; performing surgical operations in the treatment of injuries, diseases and disorders of the human body and engaging in clinical research within the field of activities and scope of competence.

(Source: *Canadian Classification and Dictionary of Occupations*. Ottawa, Ontario: Employment and Immigration Canada, 1980)

There were 4,005 physicians who resided in Alberta and registered with the College of Physicians and Surgeons of Alberta in 1987.[1] Of these, 52 percent were general practitioners and 48 percent were specialists. The number of physicians by specialty is shown in Table 4 of this chapter.

Physicians located in the Census Metropolitan Areas of Calgary and Edmonton accounted for 76 percent of the total. Approximately 10 percent were located in communities with a population of between 10,000 and 60,000. About 5 percent were located in communities with a population of between 5,000 and 10,000; and 8 percent were located in communities with a population of less than 5,000. The number of physicians registered in Alberta grew by 6.1 percent between 1985 and 1987, while the provincial population increased by 1.3 percent during the same period. The physician-to-population ratio was 1:594 in 1987.

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[1] Source: College of Physicians and Surgeons of Alberta. Number of physicians fully registered with the College of Physicians and Surgeons as of December 31, 1987. Excludes out-of-province, retired, non-practising life members, and members on the courtesy or education registries.

II. Professional Association and Legislation Information

a) Licensing, Registration, or Certification Authority:

College of Physicians and Surgeons of Alberta
9901 - 108 Street
Edmonton, Alberta
T5K 1G8

Registrar: Dr. L. H. LeRiche
President: Dr. M. H. Atkinson

b) Professional Association:

Alberta Medical Association
#304, 9901 - 108 Street
Edmonton, Alberta
T5K 1G8

President: Dr. Ruth Collins-Nakai

c) Legislation:

Under the authority of the Medical Profession Act, all individuals who wish to practise as physicians or osteopaths must be currently registered with the College of Physicians and Surgeons of Alberta.

Besides registration, the College of Physicians and Surgeons of Alberta is responsible for regulating the conduct of physicians and osteopaths and for maintaining professional discipline. The Medical Profession Act sets the basic educational qualifications required for registration with the College. However, the College sets the post-basic educational qualifications required for registration as a medical specialist and also prescribes the conditions of practice of other physicians registered on special registries.

III. Personnel Data

TABLE 1A

GEOGRAPHIC DISTRIBUTION OF REGISTERED PHYSICIANS, ALBERTA, 1987

Census Division (Major Urban Centre)	Number Practising[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	69	56,700	1:822
2 (Lethbridge)	153	115,000	1:752
3 (Pincher Creek)	36	34,400	1:956
4 (Hanna)	12	12,000	1:1,000
5 (Drumheller)	27	38,100	1:1,411
6 (Calgary excluding CMA)	41	42,618	1:1,039
7 (Stettler)	34	40,400	1:1,188
8 (Red Deer)	167	118,400	1:709
9 (Rocky Mountain House)	11	16,000	1:1,455
10 (Camrose)	71	79,100	1:1,114
11 (Edmonton excluding CMA)	20	24,171	1:1,209
12 (Bonnyville)	45	45,100	1:1,002
13 (Whitecourt)	39	54,400	1:1,395
14 (Hinton)	20	24,800	1:1,240
15 (Banff)	29	23,100	1:797
16 (Fort McMurray)	41	48,600	1:1,185
17 (High Level)	33	49,600	1:1,503
18 (Grande Cache)	9	13,300	1:1,478
19 (Grande Prairie)	79	74,300	1:941
Census Metropolitan Area (CMA) of Calgary	1,349	682,782[3]	1:506
Census Metropolitan Area (CMA) of Edmonton	1,704	787,329[3]	1:462
Regional Location Unknown	16	-	-
PROVINCIAL TOTAL	**4,005**	**2,380,200**	**1:594**

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[1] Source: College of Physicians and Surgeons of Alberta. Number of physicians who were fully registered with the College of Physicians and Surgeons of Alberta as of December 31, 1987. Excludes out-of-province, retired, non-practising life members, and members on the courtesy or education registries.

[2] Source: "Estimates of Population and Growth by Alberta Census Divisions", Alberta Bureau of Statistics, May 1988.

[3] Source: Alberta Municipal Affairs and Alberta Bureau of Statistics, October 1987.

TABLE 1B

COMMUNITY BREAKDOWN OF REGISTERED PHYSICIANS, ALBERTA, 1987

Community by Population Size	Number Practising[1]	Population[2]	Personnel-to-Population Ratio
Over 60,000			
Census Metropolitan Area (CMA) of Calgary	1,349	682,782[3]	1:506
Census Metropolitan Area (CMA) of Edmonton	1,704	787,329[3]	1:462
Between 10,000 and 60,000			
Camrose	21	12,968	1:618
Fort McMurray	33	34,949	1:1,059
Grande Prairie	44	26,471	1:602
Lethbridge	119	60,610	1:509
Lloydminster	14	10,201	1:729
Medicine Hat	63	41,804	1:664
Red Deer	109	54,309	1:498
Wetaskiwin	17	10,103	1:594
Between 5,000 and 10,000			
Bonnyville	10	5,575	1:558
Brooks	10	9,464	1:946
Crowsnest Pass	5	6,912	1:1,382
Drumheller	13	6,366	1:490
Edson	8	7,323	1:915
High River	8	5,096	1:637
Hinton	12	8,629	1:719
Innisfail	9	5,513	1:613
Lacombe	10	6,080	1:608
Okotoks	8	5,522	1:690
Peace River	9	6,355	1:706
Ponoka	22	5,473	1:249
Rocky Mountain House	11	5,261	1:478
Slave Lake	10	5,538	1:554
St. Paul	8	5,128	1:641
Stettler	8	5,147	1:643
Taber	7	6,382	1:912
Vegreville	8	5,276	1:660
Whitecourt	5	5,737	1:1,147
Under 5,000	335	541,897	1:1,618
Regional Location Unknown	16	-	-
PROVINCIAL TOTAL	**4,005**	**2,380,200[4]**	**1:594**

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[1] Source: College of Physicians and Surgeons of Alberta. Number of physicians who were fully registered with the College of Physicians and Surgeons of Alberta as of December 31, 1987. Excludes out-of-province, retired, non-practising life members, and members on the courtesy or education registries.

[2] Source: "Official Population List", Municipal Services Branch, Alberta Municipal Affairs, September 1987.

[3] Source: Alberta Municipal Affairs and Alberta Bureau of Statistics, October 1987.

[4] Source: "Alberta Population Growth, Fourth Quarter, 1987", Alberta Bureau of Statistics, March 1988.

TABLE 2

SELECTED MANPOWER STATISTICS FOR PHYSICIANS IN ALBERTA, 1985, 1986, AND 1987

	1985	1986	1987
Number of Registered Personnel[1]	3,773	3,906	4,005
% Change in Number of Registered Personnel	1.9%	3.5%	2.5%
Population (Alberta)[2]	2,348,500	2,375,300	2,380,200
% Change in Population	0.4%	1.1%	0.2%
Personnel-to-Population Ratios:			
- Alberta	1:622	1:608	1:594

IV. Educational Programs

Alberta has two medical schools: one at the University of Alberta, Edmonton, the other at the University of Calgary. The University of Alberta program is four years in length, based on a nine-month academic year; the University of Calgary program is three years in length, based on a 12-month academic year. Successful completion of a two-year pre-medicine program is the basic entry requirement for both programs. The two programs together produced 187 graduates in 1986-87.

Under the Medical Profession Act, three post-graduate training routes are available for physicians seeking to meet licensure requirements in Alberta. Physicians applying for general licensure must have successfully completed either the certification requirements of a Family Medicine Program approved by the College of Physicians and Surgeons of Alberta, or a two-year pre-licensure training program which meets the requirements specified by the College of Physicians and Surgeons of Alberta. To be licensed as a specialist, the applicant must complete an approved residency training program in an accredited institution and must pass the certification examinations set by the Royal College of Physicians and Surgeons of Canada.

With respect to post-graduate medical training, the Department of Hospitals and Medical Care establishes the number of funded intern/residency positions with the co-operation of the two medical schools. The medical schools, in co-operation with teaching hospitals in Calgary and Edmonton, then apportion the total funded positions among the various medical specialties. During the academic year 1987-88, 647 full-time-equivalent intern/residency positions in Alberta teaching hospitals were funded by the Department of Hospitals and Medical Care.

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[1] Source: College of Physicians and Surgeons of Alberta. Number of physicians who were fully registered with the College of Physicians and Surgeons of Alberta as of December 31 of the indicated year. Excludes out-of-province, retired, non-practising life members, and members on the courtesy or education registries.

[2] Source: "Alberta Population Growth, Fourth Quarter, 1987", Alberta Bureau of Statistics, March 1988.

TABLE 3

EDUCATIONAL PROGRAMS FOR PHYSICIANS IN ALBERTA[1]

	1984-85	1985-86	1986-87
University of Alberta (Program Length: 4 years)			
Enrolments:			
1st Year	120	119	121
2nd Year	117	116	120
3rd Year	112	119	110
4th Year	114	101	122
Graduates:	115	109	115
University of Calgary (Program Length: 3 years)			
Enrolments:			
1st Year	74	73	73
2nd Year	72	72	72
3rd Year	70	73	73
Graduates:	69	69	72
PROVINCIAL TOTAL Number of Training Programs: 2			
Graduates:	183	178	187

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[1] Source: *Alberta Health and Social Service Education Programs Inventory, 1986-87*. Edmonton, Alberta: Department of Advanced Education, December 1987.

TABLE 4

PHYSICIANS BY SPECIALTY AND PERSONNEL-TO-POPULATION RATIOS BY SPECIALTY, ALBERTA, 1987

Specialty	Number of Physicians[1]	Personnel-to-Population Ratio[2]
Anaesthesia	157	1:15,161
Anatomical Pathology	38	1:62,637
Cardiology	35	1:68,006
Cardiovascular & Thoracic Surgery	26	1:91,546
Clinical Immunology	1	1:2,380,200
Community Medicine	17	1:140,012
Dermatology	23	1:103,487
Diagnostic Radiology	154	1:15,456
Emergency Medicine	27	1:88,156
Endocrinology Metabolism	6	1:396,700
Gastroenterology	20	1:119,010
General Pathology	61	1:39,020
General Surgery	167	1:14,253
Geriatric Medicine	1	1:2,380,200
Haematological Pathology	5	1:476,040
Haematology	8	1:297,525
Infectious Diseases	5	1:476,040
Internal Medicine	316	1:7,532
Medical Biochemistry	5	1:476,040
Medical Microbiology	9	1:264,467
Medical Oncology	1	1:2,380,200
Nephrology	4	1:595,050
Neurology	39	1:61,031
Neuropathology	6	1:396,700
Neurosurgery	16	1:148,763
Nuclear Medicine	12	1:198,350
Obstetrics & Gynaecology	114	1:20,879
Occupational Medicine	1	1:2,380,200
Ophthalmology	70	1:34,003
Orthopaedic Surgery	81	1:29,385
Otolaryngology	31	1:76,781
Pediatrics	151	1:15,763
Pediatric Cardiology	1	1:2,380,200
Pediatrics General Surgery	3	1:793,400
Physical Medicine & Rehabilitation	13	1:183,092
Plastic Surgery	29	1:82,076
Psychiatry	166	1:14,339
Radiation Oncology	20	1:119,010
Respiratory Medicine	18	1:132,233
Rheumatology	14	1:170,014
Thoracic Surgery	1	1:2,380,200
Urology	36	1:66,117
Vascular Surgery	4	1:595,050
Specialty Total	1,912	1:1,245
General Practice Total	2,093	1:1,137
GRAND TOTAL	**4,005**	**1:594**

[1] Source: College of Physicians and Surgeons of Alberta. Number of physicians who were fully registered with the College of Physicians and Surgeons of Alberta as of December 31, 1987. Excludes out-of-province, retired, non-practising life members, and members on the courtesy or education registries.

[2] Source: Ratios calculated using a provincial population of 2,380,200, as taken from "Estimates of Population and Growth by Alberta Census Divisions", Alberta Bureau of Statistics, May 1988.

Podiatrists

I. Overview

Definition: A podiatrist treats ailments, diseased conditions, deformities or injuries of the human foot and the leg muscles controlling the foot; examines, diagnoses and treats such ailments, conditions, deformities or injuries but does not treat systemic diseases of bones, muscles or ligaments, or does not use X-ray equipment for purposes other than diagnostic, or does not use anaesthetics other than local.

(Source: Podiatry Act, RSA 1980)

There were 21 podiatrists who resided in Alberta and registered with the Alberta Podiatry Association (A.P.A.) in 1987.[1] All were located in the four major urban centres: the Census Metropolitan Areas of Calgary and Edmonton and the cities of Lethbridge and Medicine Hat. The provincial podiatrist-to-population ratio was 1:113,343 in 1987.

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[1] Source: Alberta Podiatry Association. Number of podiatrists registered with the A.P.A. and residing in Alberta as of December 31, 1987.

II. Professional Association and Legislation Information

a) Licensing, Registration, or Certification Authority:

Board of Examiners in Podiatry
c/o Professions and Occupations Bureau
9th Floor, John E. Brownlee Building
10365 - 97 Street
Edmonton, Alberta
T5J 3W7

b) Professional Association:

Alberta Podiatry Association
134 - 8500 MacLeod Trail
Calgary, Alberta
T2H 2N1

President: Dr. Paul Kruper

c) Legislation:

In Alberta, podiatrists are regulated by the Podiatry Act. In accordance with this statute, individuals who wish to practise as podiatrists in Alberta apply to the Board of Examiners in Podiatry, a provincial certification body. The Board sets the educational qualifications required for registration and certifies eligible individuals. Successful candidates register with the Alberta Podiatry Association (A.P.A.), the professional body responsible for registration and discipline of its members.

In June 1987, an amendment to the Podiatry Act removed the exclusive scope of practice clause in order to allow other qualified individuals, such as nurses, to offer foot care services. Although the mandatory requirements of the Act have been removed, individuals who wish to practise podiatry and bill services to the provincial health care insurance program are still required to obtain certification through the Board and maintain membership in the Association.

In April 1988, the Alberta Podiatry Association applied to the Health Disciplines Board for designation under the Health Disciplines Act. The Board must first complete an investigation for this discipline before a decision will be made on this form of regulation.

III. Personnel Data

TABLE 1

GEOGRAPHIC DISTRIBUTION OF REGISTERED PODIATRISTS, ALBERTA, 1987

Census Division (Major Urban Centre)	Number Practising[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	1	56,700	1:56,700
2 (Lethbridge)	1	115,000	1:115,000
Other Census Divisions	0	738,389[3]	-
Census Metropolitan Area (CMA) of Calgary	11	682,782[4]	1:62,071
Census Metropolitan Area (CMA) of Edmonton	8	787,329[4]	1:98,416
PROVINCIAL TOTAL	**21**	**2,380,200**	**1:113,343**

---

[1] Source: "Alberta Podiatry Association. Number of podiatrists registered with the A.P.A. and residing in Alberta as of December 31, 1987.

[2] Source: "Estimates of Population and Growth by Alberta Census Divisions", Alberta Bureau of Statistics, May 1988.

[3] Source: Calculated as the difference between the provincial population and the combined populations of Census Division 1, Census Division 2, CMA Calgary and CMA Edmonton, as presented in Table 1 above.

[4] Source: Alberta Municipal Affairs and Alberta Bureau of Statistics, October 1987.

TABLE 2

SELECTED MANPOWER STATISTICS FOR PODIATRISTS IN ALBERTA, 1985, 1986, AND 1987

	1985	1986	1987
Number of Registered Personnel[1]	18	19	21
% Change in Number of Registered Personnel	0.0%	5.6%	10.5%
Population (Alberta)[2]	2,348,500	2,375,300	2,380,200
% Change in Population	0.4%	1.1%	0.2%
Personnel-to-Population Ratios:			
- Alberta	1:130,472	1:125,015	1:113,343

IV. Educational Programs

There are no training programs for podiatrists in Canada. The United States has five schools of podiatry. The programs consist of four years of professional training with two prerequisite years of university studies. All of Alberta's podiatrists were trained in the United States.

---

[1] Source: Alberta Podiatry Association. Number of podiatrists registered with the A.P.A. and residing in Alberta as of December 31 of the indicated year.

[2] Source: "Alberta Population Growth, Fourth Quarter, 1987", Alberta Bureau of Statistics, March 1988.

Prosthetists and Orthotists

I. Overview

Definition: Design, build, fit and repair prosthetic and orthotic appliances to correct physical defects of human body. Interpret physician's specifications for prosthesis (artificial limb) or orthosis (support or brace). Measure patient for appliance. Design or draw working sketch or model of prosthesis or orthosis required. Build or direct other workers to build prosthetic or orthotic appliance, using materials, such as plastic, wood, leather, steel, aluminium and padding, and machine and hand-tools. Fit patient with appliance and add or remove padding, adjust parts and change tension to achieve maximum comfort and optimum function. Revise working sketch to reflect changes and direct other workers to modify appliance. Advise patient in application, use and care of appliance. Service and repair appliance as necessary.

(Source: *Canadian Classification and Dictionary of Occupations*. Ottawa, Ontario: Employment and Immigration Canada, 1980)

Since registration with the Alberta Association of Prosthetists and Orthotists is not mandatory, the survey of health and social service personnel working in Alberta, conducted on March 31, 1987 by the Alberta Health and Social Services Disciplines Committee, was used as an alternative source of manpower information.

There were 34 prosthetists and orthotists practising in Alberta in 1987.[1] All were employed in the Census Metropolitan Areas of Calgary and Edmonton. These individuals are employed in acute care hospitals, auxiliary hospitals, community agencies and private practice. The provincial prosthetist/orthotist-to-population ratio was 1:70,006 in 1987.

---

[1] Source: "Health and Social Service Personnel Working in Alberta, March 31, 1987", Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

II. Professional Association and Legislation Information

a) Licensing, Registration, or Certification Authority:

None.

b) Professional Association:

Alberta Association of Prosthetists and Orthotists
10745 - 124 Street
Edmonton, Alberta
T5M 0H2

President: Mr. Frank Hayday
President Elect: Mr. Orest Matvsewycz

c) Legislation:

There is no legislation regulating prosthetists and orthotists in Alberta at present.

III. Personnel Data

TABLE 1

GEOGRAPHIC DISTRIBUTION OF PRACTISING PROSTHETISTS AND ORTHOTISTS, ALBERTA, 1987

Census Division (Major Urban Centre)	Number Practising[1]	Population	Personnel-to-Population Ratio
Census Metropolitan Area (CMA) of Calgary	12	682,782[3]	1:56,899
Census Metropolitan Area (CMA) of Edmonton	22	787,329[3]	1:35,788
Areas other than CMA Calgary and CMA Edmonton	0	910,089[4]	-
PROVINCIAL TOTAL	**34**	**2,380,200[2]**	**1:70,006**

[1] Source: "Health and Social Service Personnel Working in Alberta, March 31, 1987", Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[2] Source: "Estimates of Population and Growth by Alberta Census Divisions", Alberta Bureau of Statistics, May 1988.

[3] Source: Alberta Municipal Affairs and Alberta Bureau of Statistics, October 1987.

[4] Source: Calculated as the difference between the provincial population and the combined populations of CMA Calgary and CMA Edmonton, as presented in Table 1 above.

TABLE 2

SELECTED MANPOWER STATISTICS FOR PROSTHETISTS AND ORTHOTISTS IN ALBERTA, 1985, 1986, AND 1987

	1985	1986	1987
Number of Practising Personnel[1]	38	31	34
% Change in Number of Practising Personnel	-15.6%	-18.4%	9.6%
Population (Alberta)[2]	2,348,500	2,375,300	2,380,200
% Change in Population	0.4%	1.1%	0.2%
Personnel-to-Population Ratio:			
- Alberta	1:61,803	1:76,622	1:70,006

IV. Educational Programs

There are no formal training programs for prosthetists and orthotists in Alberta. Although many of the prosthetists and orthotists in the province are trained on-the-job, some have been trained in post-secondary educational institutions in other provinces such as the British Columbia Institute of Technology (B.C.I.T.). Alberta renewed its inter-provincial training agreement with B.C.I.T. and the British Columbia Government in 1986 to purchase training places for Alberta students. The number of places reserved was increased from two to three every two years.

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[1] Source: "Health and Social Service Personnel Working in Alberta", March 31, 1985, 1986, 1987, Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[2] Source: "Alberta Population Growth, Fourth Quarter, 1987", Alberta Bureau of Statistics, March 1988.

Psychiatric Nurses

I. Overview

Definition: Provide nursing care to patients with mental and emotional problems in hospitals and clinics or in private homes. Administer prescribed medications and treatments and attend to total nursing care of assigned patients. Observe, record and report symptoms and changes in patient's condition. Confer with psychiatrists, psychologists, social workers, occupational therapists and other specialists to evaluate patient's condition and to plan therapy. Encourage patients to participate in routine work functions and recreational, community and other activities to build self-confidence and to develop relationships with others. Counsel patients at home or in clinic and evaluate patient's adjustment in community.

(Source: *Canadian Classification and Dictionary of Occupations.* Ottawa, Ontario: Employment and Immigration Canada, 1980)

There were 1,018 psychiatric nurses who resided in Alberta and were members of the Registered Psychiatric Nurses' Association of Alberta (R.P.N.A.A.) in March 1988.[1] According to a manpower survey conducted by the Alberta Health and Social Services Disciplines Committee, there were 808 psychiatric nurses employed in health and social service agencies and institutions in 1987.[2]

Psychiatric nurses located in the Census Metropolitan Areas of Calgary and Edmonton accounted for 63 percent of those registered with the R.P.N.A.A. The psychiatric nurse-to-population ratio was 1:2,338 in Alberta in 1987.

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[1] Source: Registered Psychiatric Nurses' Association of Alberta. Number of psychiatric nurses registered with the R.P.N.A.A. and residing in Alberta as of March 22, 1988. Registration data for the membership as of December 31, 1987 was not available.

[2] Source: "Health and Social Service Personnel Working in Alberta, March 31, 1987", Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

II. Professional Association and Legislation Information

a) Professional Association/Registration Body:

Registered Psychiatric Nurses' Association of Alberta
#201, 9711-45 Avenue
Edmonton, Alberta
T6E 5V8

Executive Director: Mr. Tim Schultz
President: Mr. Douglas C. Buist
President Elect: Mr. David Somers

b) Legislation:

Until January 1, 1988, psychiatric nurses were governed by the Psychiatric Nurses Association Act and the Psychiatric Nurses Training Act. At that time, regulations under the Health Disciplines Act became effective. Under this Act, the Registered Psychiatric Nurses' Association of Alberta is the body responsible for registration of members and handling of complaints. Through regulations, the Health Disciplines Board sets the educational qualifications required for registration. The regulations also reserve the titles "psychiatric nurse" and "registered psychiatric nurse" for registered members.

III. Personnel Data

TABLE 1A

GEOGRAPHIC DISTRIBUTION OF REGISTERED PSYCHIATRIC NURSES, ALBERTA, 1987

Census Division (Major Urban Centre)	Number Practising[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	9	56,700	1:6,300
2 (Lethbridge)	23	115,000	1:5,000
3 (Pincher Creek)	21	34,400	1:1,638
4 (Hanna)	2	12,000	1:6,000
5 (Drumheller)	4	38,100	1:9,525
6 (Calgary excluding CMA)	2	42,618	1:21,309
7 (Stettler)	4	40,400	1:10,100
8 (Red Deer)	228	118,400	1:519
9 (Rocky Mountain House)	0	16,000	-
10 (Camrose)	33	79,100	1:2,397
11 (Edmonton excluding CMA)	9	24,171	1:2,686
12 (Bonnyville)	3	45,100	1:15,033
13 (Whitecourt)	4	54,400	1:13,600
14 (Hinton)	3	24,800	1:8,267
15 (Banff)	1	23,100	1:23,100
16 (Fort McMurray)	1	48,600	1:48,600
17 (High Level)	3	49,600	1:16,533
18 (Grande Cache)	7	13,300	1:1,900
19 (Grande Prairie)	22	74,300	1:3,377
Census Metropolitan Area (CMA) of Calgary	148	682,782[3]	1:4,613
Census Metropolitan Area (CMA) of Edmonton	491	787,329[3]	1:1,604
PROVINCIAL TOTAL	**1,018**	**2,380,200**	**1:2,338**

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[1] Source: Registered Psychiatric Nurses' Association of Alberta (R.P.N.A.A.). Number of psychiatric nurses registered with the R.P.N.A.A. and residing in Alberta as of March 22, 1988.

[2] Source: "Estimates of Population and Growth by Alberta Census Divisions", Alberta Bureau of Statistics, May 1988.

[3] Source: Alberta Municipal Affairs and Alberta Bureau of Statistics, October 1987.

TABLE 1B

COMMUNITY BREAKDOWN OF PSYCHIATRIC NURSES, ALBERTA, 1987

Community by Population Size	Number Practising[1]	Population[2]	Personnel-to-Population Ratio
Over 60,000			
Census Metropolitan Area (CMA) of Calgary	148	682,782[3]	1:4,613
Census Metropolitan Area (CMA) of Edmonton	491	787,329[3]	1:1,604
Between 10,000 and 60,000			
Camrose	19	12,968	1:683
Fort McMurray	1	34,949	1:34,949
Grande Prairie	16	26,471	1:1,654
Lethbridge	14	60,610	1:4,329
Lloydminster	0	10,201	-
Medicine Hat	4	41,804	1:10,451
Red Deer	38	54,309	1:1,429
Wetaskiwin	2	10,103	1:5,052
Between 5,000 and 10,000			
Bonnyville	1	5,575	1:5,575
Brooks	0	9,464	-
Crowsnest Pass	0	6,912	-
Drumheller	4	6,366	1:1,592
Edson	1	7,323	1:7,323
High River	0	5,096	-
Hinton	1	8,629	1:8,629
Innisfail	5	5,513	1:1,103
Lacombe	16	6,080	1:380
Okotoks	1	5,522	1:5,522
Peace River	3	6,355	1:2,118
Ponoka	160	5,473	1:34
Rocky Mountain House	0	5,261	-
Slave Lake	1	5,538	1:5,538
St. Paul	1	5,128	1:5,128
Stettler	1	5,147	1:5,147
Taber	1	6,382	1:6,382
Vegreville	0	5,276	-
Whitecourt	0	5,737	-
Under 5,000	89	541,897	1:6,089
PROVINCIAL TOTAL	**1,018**	**2,380,200[4]**	**1:2,338**

---

[1] Source: Registered Psychiatric Nurses' Association of Alberta (R.P.N.A.A.). Number of psychiatric nurses registered with the R.P.N.A.A. and residing in Alberta as of March 22, 1988.

[2] Source: "Official Population List", Municipal Services Branch, Alberta Municipal Affairs, September 1987.

[3] Source: Alberta Municipal Affairs and Alberta Bureau of Statistics, October 1987.

[4] Source: "Alberta Population Growth, Fourth Quarter, 1987", Alberta Bureau of Statistics, March 1988.

TABLE 2

SELECTED MANPOWER STATISTICS FOR PSYCHIATRIC NURSES IN ALBERTA, 1985, 1986, AND 1987

	1985	1986	1987
Number of Registered or Practising Personnel	645[1]	1,031[2]	1,018[3]
% Change in Number of Registered or Practising Personnel	N/A[4]	N/A[5]	-1.3%
Population (Alberta)[6]	2,348,500	2,375,300	2,380,200
% Change in Population	0.4%	1.1%	0.2%
Personnel-to-Population Ratios:			
- Alberta	1:3,641	1:2,304	1:2,338

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[1] Source: "Health and Social Service Personnel Working in Alberta, March 31, 1985", Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[2] Source: Registered Psychiatric Nurses' Association of Alberta (R.P.N.A.A.). Number of psychiatric nurses registered with the R.P.N.A.A. and residing in Alberta as of December 31, 1986.

[3] Source: Registered Psychiatric Nurses' Association of Alberta (R.P.N.A.A.). Number of psychiatric nurses registered with the R.P.N.A.A. and residing in Alberta as of March 22, 1988.

[4] Since the 1984 survey underreported the number of psychiatric nurses, the 1984 figure and the 1985 figure are not comparable.

[5] Since the source of information for 1986 (and 1987) is different from the source for 1985, the data from 1986 and 1985 are not comparable.

[6] Source: "Alberta Population Growth, Fourth Quarter, 1987", Alberta Bureau of Statistics, March 1988.

IV. Educational Programs

Both Alberta Hospital, Edmonton and Alberta Hospital, Ponoka offer a two-year hospital-based psychiatric nursing diploma program. The two programs together produced 51 graduates in 1986-87. Before students are eligible for registration, they must pass an examination approved by the Health Disciplines Board.

TABLE 3

EDUCATIONAL PROGRAMS FOR PSYCHIATRIC NURSES IN ALBERTA[1]

	1984-85	1985-86	1986-87
Alberta Hospital - Edmonton (Program Length: 2 years)			
Enrolments:			
1st Year	42	42	40
2nd Year	32	31	30
Graduates:	29	30	23
Alberta Hospital - Ponoka (Program Length: 2 years)			
Enrolments:			
1st Year	38	37	40
2nd Year	27	26	30
Graduates:	27	26	28
PROVINCIAL TOTAL Number of Training Programs: 2			
Graduates:	56	56	51

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[1] Source: *Alberta Health and Social Service Education Programs Inventory, 1986-87*. Edmonton, Alberta: Department of Advanced Education, December 1987.

Psychologists

I. Overview

Definition: Collect, interpret and apply scientific data for the purpose of investigating psychological phenomena and formulating and applying psychological principles and laws in predicting and controlling behaviour in society.

Study human behaviour and mental processes and investigate and recommend or provide treatment of psychological problems. Plan and carry out experiments using human beings and animal subjects, observe behaviour, and measure mental and physical characteristics. Analyze effects of hereditary and environmental factors on individual thought and behaviour. Undertake diagnosis, treatment and prevention of personality disorders and problems of maladjustment to social and occupational environment.

(Source: *Canadian Classification and Dictionary of Occupations*. Ottawa, Ontario: Employment and Immigration Canada, 1980)

There were 1,121 certified psychologists who resided in Alberta and registered with the Psychologists Association of Alberta (P.A.A.) in 1987.[1] Not all certified psychologists practise in the health care and social service sector. According to a manpower survey conducted by the Alberta Health and Social Services Disciplines Committee, there were 719 psychologists employed in health care and social service agencies and institutions in Alberta in 1987.[2]

Psychologists in the Census Metropolitan Areas of Calgary and Edmonton accounted for 85 percent of the total. The provincial certified psychologist-to-population ratio was 1:2,123 in 1987.

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[1] Source: Psychologists Association of Alberta. Number of certified psychologists registered with the P.A.A. and residing in Alberta as of December 31, 1987. Excludes associate and student members.

[2] Source: "Health and Social Service Personnel Working in Alberta, March 31, 1987", Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

II. Professional Association and Legislation Information

a) Professional Association/Registration Body:

Psychologists Association of Alberta
Suite 400, Sunlife Place
10123 - 99 Street
Edmonton, Alberta
T5J 3H1

Registrar/Executive Director: Dr. Carroll Ganam
President: Dr. Leo P. Mos
President Elect: Dr. S. Whitsett

b) Legislation:

Psychologists are governed by the Psychology Profession Act which was proclaimed in March 1987 (except Section 15(1)).

Under the new act, the titles "psychologist" and "chartered psychologist" alone or in combination with other words are reserved for registered members. Non-registered members may still practise if this restriction is observed.

In addition, the titles "psychological associate in school psychology" and "psychological assistant" are reserved by regulation. Individuals who use titles which imply they are psychologists are contravening the legislation if they are not registered with the Psychologists Association of Alberta.

The Psychologists Association of Alberta is now responsible for registration, practice review and maintaining professional discipline. The Psychology Profession Act and Regulation set the basic educational qualifications required for registration as a psychologist. The Universities Coordinating Council has the authority to approve academic programs and determine equivalencies for registration as a certified psychologist.

III. Personnel Data

TABLE 1A

GEOGRAPHIC DISTRIBUTION OF REGISTERED PSYCHOLOGISTS, ALBERTA, 1987

Census Division (Major Urban Centre)	Number Practising[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	6	56,700	1:9,450
2 (Lethbridge)	29	115,000	1:3,966
3 (Pincher Creek)	6	34,400	1:5,733
4 (Hanna)	0	12,000	-
5 (Drumheller)	5	38,100	1:7,620
6 (Calgary excluding CMA)	14	42,618	1:3,044
7 (Stettler)	1	40,400	1:40,400
8 (Red Deer)	53	118,400	1:2,234
9 (Rocky Mountain House)	0	16,000	-
10 (Camrose)	2	79,100	1:39,550
11 (Edmonton excluding CMA)	3	24,171	1:8,057
12 (Bonnyville)	6	45,100	1:7,517
13 (Whitecourt)	13	54,400	1:4,185
14 (Hinton)	2	24,800	1:12,400
15 (Banff)	3	23,100	1:7,700
16 (Fort McMurray)	10	48,600	1:4,860
17 (High Level)	2	49,600	1:24,800
18 (Grande Cache)	0	13,300	-
19 (Grande Prairie)	13	74,300	1:5,715
Census Metropolitan Area (CMA) of Calgary	459	682,782[3]	1:1,488
Census Metropolitan Area (CMA) of Edmonton	494	787,329[3]	1:1,594
PROVINCIAL TOTAL	**1,121**	**2,380,200**	**1:2,123**

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[1] Source: Psychologists Association of Alberta. Number of certified psychologists registered with the P.A.A. and residing in Alberta as of December 31, 1987. Excludes associate and student members.

[2] Source: "Estimates of Population and Growth by Alberta Census Divisions", Alberta Bureau of Statistics, May 1988.

[3] Source: Alberta Municipal Affairs and Alberta Bureau of Statistics, October 1987.

TABLE 1B

COMMUNITY BREAKDOWN OF PSYCHOLOGISTS, ALBERTA, 1987

Community by Population Size	Number Practising[1]	Population[2]	Personnel-to-Population Ratio
Over 60,000			
Census Metropolitan Area (CMA) of Calgary	459	682,782[3]	1:1,488
Census Metropolitan Area (CMA) of Edmonton	494	787,329[3]	1:1,594
Between 10,000 and 60,000			
Camrose	1	12,968	1:12,968
Fort McMurray	6	34,949	1:5,825
Grande Prairie	11	26,471	1:2,406
Lethbridge	26	60,610	1:2,331
Lloydminster	0	10,201	-
Medicine Hat	6	41,804	1:6,967
Red Deer	43	54,309	1:1,263
Wetaskiwin	2	10,103	1:5,052
Between 5,000 and 10,000			
Bonnyville	2	5,575	1:2,788
Brooks	1	9,464	1:9,464
Crowsnest Pass	0	6,912	-
Drumheller	2	6,366	1:3,183
Edson	1	7,323	1:7,323
High River	2	5,096	1:2,548
Hinton	1	8,629	1:8,629
Innisfail	1	5,513	1:5,513
Lacombe	0	6,080	-
Okotoks	5	5,522	1:1,104
Peace River	2	6,355	1:3,178
Ponoka	6	5,473	1:912
Rocky Mountain House	0	5,261	-
Slave Lake	0	5,538	-
St. Paul	2	5,128	1:2,564
Stettler	1	5,147	1:5,147
Taber	1	6,382	1:6,382
Vegreville	0	5,276	-
Whitecourt	3	5,737	1:1,912
Under 5,000	43	541,897	1:12,602
PROVINCIAL TOTAL	**1,121**	**2,380,200[4]**	**1:2,123**

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[1] Source: Psychologists Association of Alberta. Number of certified psychologists registered with the P.A.A. and residing in Alberta as of December 31, 1987. Excludes associate and student members.

[2] Source: "Official Population List", Municipal Services Branch, Alberta Municipal Affairs, September 1987.

[3] Source: Alberta Municipal Affairs and Alberta Bureau of Statistics, October 1987.

[4] Source: "Alberta Population Growth, Fourth Quarter, 1987", Alberta Bureau of Statistics, March 1988.

TABLE 2

SELECTED MANPOWER STATISTICS FOR PSYCHOLOGISTS IN ALBERTA, 1985, 1986, AND 1987

	1985	1986	1987
Number of Registered Personnel[1]	1,125	1,097	1,121
% Change in Number of Registered Personnel	N/A[2]	-2.5%	2.2%
Population (Alberta)[3]	2,348,500	2,375,300	2,380,200
% Change in Population	0.4%	1.1%	0.2%
Personnel-to-Population Ratios:			
- Alberta	1:2,088	1:2,165	1:2,123

---

[1] Source: Psychologists Association of Alberta. Number of certified psychologists registered with the P.A.A. and residing in Alberta as of December 31 of the indicated year. Excludes associate and student members.

[2] The 1984 figure and 1985 figure are not comparable because the former includes both certified and non-certified psychologists, while the latter includes only certified psychologists.

[3] Source: "Alberta Population Growth, Fourth Quarter, 1987", Alberta Bureau of Statistics, March 1988.

IV. Educational Programs

There are six master's degree programs in psychology in Alberta: Master of Science at the University of Calgary, Master of Arts and Master of Science at the University of Alberta, Master of Education in Educational Psychology at the University of Alberta and the University of Calgary, and Master of Science in Educational Psychology at the University of Calgary. These programs produced 102 graduates in 1986-87.

In addition, the University of Alberta and the University of Calgary have doctoral programs in both psychology and educational psychology. There were 24 graduates in 1986-87.

TABLE 3

EDUCATIONAL PROGRAMS FOR PSYCHOLOGISTS IN ALBERTA[1]

	1984-85	1985-86	1986-87
A. MASTER'S PROGRAMS			
University of Alberta Master of Arts in Psychology (Program Length: variable)			
Enrolments:			
1st Year	6	5	3
2nd Year	4	3	5
3rd Year[2]	-	3	2
Graduates:	2	4	2
University of Alberta Master of Science in Psychology (Program Length: variable)			
Enrolments:			
1st Year	4	2	5
2nd Year	1	6	2
3rd Year[2]	3	4	4
Graduates:	2	5	4

TABLE 3 (continued)

	1984-85	1985-86	1986-87
University of Alberta Master of Education in Educational Psychology (Program Length: 4 years)			
Enrolments:			
1st Year	60	61	51
2nd Year[3]	140	126	123
Graduates:	18	34	50
University of Calgary Master of Science in Psychology (Program Length: variable)			
Enrolments:			
1st Year	9	15	7
2nd Year	12	9	14
3rd Year[2]	14	13	9
Graduates:	6	10	13
University of Calgary Master of Education in Educational Psychology (Program Length: variable)			
Enrolments:			
1st Year	19	22	32
2nd Year[3]	40	51	56
Graduates:	11	22	13
University of Calgary Master of Science in Educational Psychology (Program Length: variable)			
Enrolments:			
1st Year	10	10	20
2nd Year[3]	56	38	42
Graduates:[4]	15	15	20
PROVINCIAL TOTAL Number of Master's Programs: 6			
Graduates:	54	90	102

TABLE 3 (continued)

	1984-85	1985-86	1986-87
B. DOCTORAL PROGRAMS			
University of Alberta Ph.D. in Psychology (Program Length: approx. 2 years)			
Enrolments:			
1st Year	2	-	5
2nd Year	2	3	-
3rd Year[2]	8	10	7
Graduates:	2	3	1
University of Alberta Ph.D. in Educational Psychology (Program Length: 6 years)5			
Enrolments:			
1st Year	36	20	36
2nd Year[3]	77	93	98
Graduates:	13	19	13
University of Calgary Ph.D. in Psychology (Program Length: approx. 3 years)			
Enrolments:			
1st year	3	2	2
2nd Year	2	4	1
3rd Year[2]	11	7	9
Graduates:	5	2	1
University of Calgary Ph.D. in Educational Psychology (Program Length: 6 years)			
Enrolments:			
1st Year	10	4	6
2nd Year[3]	37	35	33
Graduates:	4	6	9
PROVINCIAL TOTAL Number of Ph.D. Programs: 4			
Graduates:	24	30	24

Psychologists

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[1] Source: *Alberta Health and Social Service Education Programs Inventory, 1986-87*. Edmonton, Alberta: Department of Advanced Education, December 1987.

[2] Third year refers to students enrolled in third and later years of the program.

[3] Second year refers to students enrolled in second and later years of the program.

[4] The graduate figures refer to those students who convocated in a given year and do not include students only recommended to pass.

[5] Ph.D. programs require a two-year residency, though the norm for completion is 3 to 4 years.

Public Health Inspectors

I. Overview

Definition: Enforce laws and regulations governing health standards and provide advice, performing any combination of the following duties: Locate persons suspected of exposure to communicable diseases to prevent further spread of disease. Interview exposed persons to secure information concerning other persons who may have been exposed. Advise people to obtain treatment. Inspect restaurants, hotels, cafeterias and other public places to ensure compliance with sanitation laws. Take samples of water, food and air, and order chemical, physical or biological tests to determine contamination. Visit plants where food, drugs, cosmetics and similar items are manufactured to investigate sanitary conditions and health and hygiene habits of persons handling consumer products. Destroy subgrades or prohibit sale of impure, toxic, damaged or misbranded items. Ascertain that required permits have been obtained and are displayed. Inspect nursing homes and hospitals to ensure conformance with standards and laws governing sanitation, facilities, ethical practices, maintenance of records and competence of personnel. Recommend changes in administrative procedures, facilities and standards to improve efficiency and service to patients. Apply regulations governing manufacture, labelling and sale of upholstered and stuffed articles to ensure use of approved materials. Inspect waste disposal sites to ensure that pollution control regulations are followed. Inspect water wells to enforce provisions of permits. Write reports and issue violation notices and corrective orders.

(Source: *Canadian Classification and Dictionary of Occupations*. Ottawa, Ontario: Employment and Immigration Canada, 1980).

Public health inspectors are also known as environmental health officers or sanitary inspectors. They are employed by federal, provincial and municipal governments, and in private industry involved with food, petroleum and pesticide products or services.

Since registration with the Canadian Institute of Public Health Inspectors is not mandatory, the survey of health and social service personnel working in Alberta, conducted on March 31, 1987 by the Alberta Health and Social Services Disciplines Committee, was used as an alternative source of manpower information.

There were 126 public health inspectors practising in Alberta in 1987.[1] Public health inspectors employed in the Census Metropolitan Areas of Calgary and Edmonton accounted for 56 percent of the total. The provincial public health inspector-to-population ratio was 1:18,890 in 1987.

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[1] Source: "Health and Social Service Personnel Working in Alberta, March 31, 1987", Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

II. Professional Association and Legislation Information

a) Licensing, Registration, or Certification Authority:

Board of Certification of Public Health Inspectors
Alberta East Central Health Unit
P.O. Box 550,
Stettler, Alberta
T0C 2L0

Board Chairman: Mr. Rob Elliot

b) Professional Association:

Canadian Institute of Public Health Inspectors
(Alberta Branch)
Box 2693
Drumheller, Alberta
T0J 0Y0

President: Mr. Dan Richen

c) Legislation:

Public health inspectors in Alberta are regulated under the Public Health Act. Under the legislation, all individuals who wish to practise as public health inspectors for a local board of health established under the Public Health Act or Health Unit Act must be certified by the Board of Certification of Public Health Inspectors which is administered by the Canadian Institute of Public Health Inspectors. This requirement does not apply to persons who became public health inspectors prior to January 1, 1961 and who have continued in such positions since that date.

III. Personnel Data

TABLE 1

GEOGRAPHIC DISTRIBUTION OF PRACTISING PUBLIC HEALTH INSPECTORS, ALBERTA, 1987

Census Division (Major Urban Centre)	Number Practising[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	4	56,700	1:14,175
2 (Lethbridge)	7	115,000	1:16,429
3 (Pincher Creek)	1	34,400	1:34,400
4 (Hanna)	2	12,000	1:6,000
5 (Drumheller)	1	38,100	1:38,100
6 (Calgary excluding CMA)	2	42,618	1:21,309
7 (Stettler)	4	40,400	1:10,100
8 (Red Deer)	5	118,400	1:23,680
9 (Rocky Mountain House)	1	16,000	1:16,000
10 (Camrose)	4	79,100	1:19,775
11 (Edmonton excluding CMA)	1	24,171	1:24,171
12 (Bonnyville)	3	45,100	1:15,033
13 (Whitecourt)	2	54,400	1:27,200
14 (Hinton)	3	24,800	1:8,267
15 (Banff)	3	23,100	1:7,700
16 (Fort McMurray)	3	48,600	1:16,200
17 (High Level)	3	49,600	1:16,533
18 (Grande Cache)	0	13,300	-
19 (Grande Prairie)	7	74,300	1:10,614
Census Metropolitan Area (CMA) of Calgary	27	682,782[3]	1:25,288
Census Metropolitan Area (CMA) of Edmonton	43	787,329[3]	1:18,310
PROVINCIAL TOTAL	**126**	**2,380,200**	**1:18,890**

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[1] Source: "Health and Social Service Personnel Working in Alberta, March 31, 1987", Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[2] Source: "Estimates of Population and Growth by Alberta Census Divisions", Alberta Bureau of Statistics, May 1988.

[3] Source: Alberta Municipal Affairs and Alberta Bureau of Statistics, October 1987.

TABLE 2

SELECTED MANPOWER STATISTICS FOR PUBLIC HEALTH INSPECTORS IN ALBERTA, 1985, 1986, AND 1987

	1985	1986	1987
Number of Practising Personnel[1]	131	129	126
% Change in Number of Practising Personnel	-3.8%	-1.5%	-2.3%
Population (Alberta)[2]	2,348,500	2,375,300	2,380,200
% Change in Population	0.4%	1.1%	0.2%
Personnel-to-Population Ratios:			
- Alberta	1:17,927	1:18,413	1:18,890

IV. Educational Programs

In Canada, only two post-secondary institutions offer formal training programs for public health inspectors. Programs in environmental health are offered at the British Columbia Institute of Technology (B.C.I.T.) in Vancouver and Ryerson Polytechnical Institute in Toronto. B.C.I.T. offers a two-year diploma program; Ryerson offers a four-year baccalaureate program. Upon completion of two years of training in either of these programs, an individual is eligible to sit for the Board of Certification examination provided he/she has completed 24 weeks of field experience in a local health authority. The certification examination consists of three parts, each of which must be successfully completed to obtain a passing grade. A candidate may attempt the examination only twice.

In Alberta, Athabasca University offers correspondence courses in public health.

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[1] Source: "Health and Social Service Personnel Working in Alberta", March 31, 1985, 1986, 1987, Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[2] Source: "Alberta Population Growth, Fourth Quarter, 1987", Alberta Bureau of Statistics, March 1988.

Recreational Therapists

I. Overview

Definition: Plan, organize and direct programs of recreational activities as part of treatment to rehabilitate mentally and physically disabled persons. Assess patient's aptitudes, capabilities, interests and motivations to determine recreational program. Plan program with individuals or groups. Organize, conduct and promote social events. Direct and coordinate games, sports, arts and crafts, drama and sightseeing tours. Train and direct volunteers. Adapt games according to patient's mental and physical abilities. Discuss patient's progress and submit reports. Feed and dress patients and perform other personal care duties, if required.

(Source: *Canadian Classification and Dictionary of Occupations*. Ottawa, Ontario: Employment and Immigration Canada, 1980)

Since there is no professional association for recreational therapists, the survey of health and social service personnel working in Alberta, conducted on March 31, 1987 by the Alberta Health and Social Services Disciplines Committee, was used as an alternative source of manpower information.

There were 262 recreational therapists practising in Alberta in 1987.[1] According to this survey, approximately one-third of these individuals were employed in nursing homes, and one-quarter in auxiliary hospitals. The remainder worked in acute care hospitals, psychiatric hospitals and other health and social service facilities.[2] Recreational therapists employed in the Census Metropolitan Areas of Calgary and Edmonton accounted for 63 percent of the total. The provincial recreational therapist-to-population ratio was 1: 9,085 in 1987.

II. Professional Association and Legislation Information

a) Professional Association/Registration Body:

None.

b) Legislation:

There is no legislation regulating recreational therapists in Alberta at present.

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[1] Source: "Health and Social Service Personnel Working in Alberta, March 31, 1987", Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[2] Ibid.

III. Personnel Data

TABLE 1

GEOGRAPHIC DISTRIBUTION OF PRACTISING RECREATIONAL THERAPISTS, ALBERTA, 1987

Census Division (Major Urban Centre)	Number Practising[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	4	56,700	1:14,175
2 (Lethbridge)	15	115,000	1:7,667
3 (Pincher Creek)	7	34,400	1:4,914
4 (Hanna)	1	12,000	1:12,000
5 (Drumheller)	3	38,100	1:12,700
6 (Calgary excluding CMA)	4	42,618	1:10,655
7 (Stettler)	4	40,400	1:10,100
8 (Red Deer)	30	118,400	1:3,947
9 (Rocky Mountain House)	1	16,000	1:16,000
10 (Camrose)	8	79,100	1:9,888
11 (Edmonton excluding CMA)	0	24,171	-
12 (Bonnyville)	5	45,100	1:9,020
13 (Whitecourt)	3	54,400	1:18,133
14 (Hinton)	1	24,800	1:24,800
15 (Banff)	1	23,100	1:23,100
16 (Fort McMurray)	1	48,600	1:48,600
17 (High Level)	0	49,600	-
18 (Grande Cache)	1	13,300	1:13,300
19 (Grande Prairie)	7	74,300	1:10,614
Census Metropolitan Area (CMA) of Calgary	80	682,782[3]	1:8,535
Census Metropolitan Area (CMA) of Edmonton	86	787,329[3]	1:9,155
PROVINCIAL TOTAL	**262**	**2,380,200**	**1:9,085**

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[1] Source: "Health and Social Service Personnel Working in Alberta, March 31, 1987", Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[2] Source: "Estimates of Population and Growth by Alberta Census Divisions", Alberta Bureau of Statistics, May 1988.

[3] Source: Alberta Municipal Affairs and Alberta Bureau of Statistics, October 1987.

TABLE 2

SELECTED MANPOWER STATISTICS FOR RECREATIONAL THERAPISTS IN ALBERTA, 1985, 1986, AND 1987

	1985	1986	1987
Number of Practising Personnel[1]	206	207	262
% Change in Number of Practising Personnel	19.8%	0.5%	26.6%
Population (Alberta)[2]	2,348,500	2,375,300	2,380,200
% Change in Population	0.4%	1.1%	0.2%
Personnel-to-Population Ratios:			
- Alberta	1:11,400	1:11,475	1:9,085

IV. Educational Programs

Mount Royal College offers a two-year diploma in recreation therapy. The program produced 24 graduates in 1986-87.

TABLE 3

EDUCATIONAL PROGRAM FOR RECREATIONAL THERAPISTS IN ALBERTA[3]

	1984-85	1985-86	1986-87
Mount Royal College (Program Length: 2 years)			
Enrolments:			
1st Year	35	31	89
2nd Year	16	22	39
Graduates:[4]	9	22	24

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[1] Source: "Health and Social Service Personnel Working in Alberta", March 31, 1985, 1986, 1987, Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[2] Source: "Alberta Population Growth, Fourth Quarter, 1987", Alberta Bureau of Statistics, March 1988.

[3] Source: *Alberta Health and Social Service Education Programs Inventory, 1986-87*. Edmonton, Alberta: Department of Advanced Education, December 1987.

[4] The number of graduates exceeds the number of second year enrolments in the previous year because all part-time students are included in first year enrolments.

Registered Nurses

I. Overview

Definition: Provide total nursing care for patients in hospitals, nursing homes, extended-care facilities and other establishments. Discuss and plan total nursing care of assigned patients with physician and other members of health team. Direct activities of nursing team or perform nursing activities to provide nursing care of patients. Administer prescribed medications and treatments. Observe, record and report symptoms and changes in patient's condition. Make nursing rounds and accompany physician on medical rounds to evaluate needs of individual patients and to assess effectiveness of nursing care. Counsel patient and family in health care and treatment to be continued at home. Direct or carry out established procedures to prepare essential facilities and equipment, and assist physician in examinations, treatments, surgery and deliveries. Perform nursing activities in obstetrics, paediatrics, orthopaedics and other clinical specializations.

(Source: *Canadian Classification and Dictionary of Occupations*. Ottawa, Ontario: Employment and Immigration Canada, 1980)

There were 22,034 nurses who resided in Alberta and registered with the Alberta Association of Registered Nurses (A.A.R.N.) in 1987.[1] According to a manpower survey conducted by the Alberta Health and Social Services Disciplines Committee, 16,597 registered nurses were employed as of March 31, 1987.[2] The number of practising registered nurses by specialty is shown in Table 4 of this chapter. Registered nurses located in the Census Metropolitan Areas of Calgary and Edmonton accounted for 66 percent of the total. The number of nurses registered in Alberta increased by 5.7 percent between 1985 and 1987, while the provincial population grew by 1.3 percent during the same period. The provincial registered nurse-to-population ratio was 1:108 in 1987.

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[1] Source: Alberta Association of Registered Nurses. Number of nurses registered with the A.A.R.N. and residing in Alberta as of September 30, 1987. Excludes inactive, honorary, associate, and retired members.

[2] Source: "Health and Social Service Personnel Working in Alberta, March 31, 1987", Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

II. Professional Association and Legislation Information

a) Professional Association/Registration Body:

Alberta Association of Registered Nurses
11620 - 168 Street
Edmonton, Alberta
T5M 4A6

Executive Director: Ms. Yvonne Chapman
Registrar: Ms. Jean Smith
President: Ms. Sharon Snell
President Elect: Ms. Phyllis Giovannetti

b) Legislation:

On January 1, 1984, the Nursing Profession Act replaced the Registered Nurses Act. Subject to certain exemptions, the Nursing Profession Act requires that all nurses practising in Alberta and who wish to use the title of "registered nurse" must register with the Alberta Association of Registered Nurses.

The Act gives the Alberta Association of Registered Nurses the authority to register qualified individuals in the appropriate registers, and to grant special permits and temporary permits to others who wish to practise under the Act.

The Act establishes a Practice Review Committee which has the authority to investigate the desirable standards of competence for nursing practice in general and the competence of particular registered nurses or permit holders. Complaints concerning unskilled practice and professional misconduct by registered nurses or permit holders may be investigated by the Professional Conduct Committee. Educational requirements for registration are established by the Universities Coordinating Council. In addition, regulations specify individuals must have completed 1125 hours or more of satisfactory nursing practice in the five years preceding registration. If this requirement is not met, a refresher course must be completed.

III. Personnel Data

TABLE 1A

GEOGRAPHIC DISTRIBUTION OF REGISTERED NURSES, ALBERTA, 1987

Census Division (Major Urban Centre)	Number Practising[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	453	56,700	1:125
2 (Lethbridge)	1,020	115,000	1:113
3 (Pincher Creek)	239	34,400	1:144
4 (Hanna)	87	12,000	1:138
5 (Drumheller)	238	38,100	1:160
6 (Calgary excluding CMA)	290	42,618	1:147
7 (Stettler)	273	40,400	1:148
8 (Red Deer)	1,232	118,400	1:96
9 (Rocky Mountain House)	77	16,000	1:208
10 (Camrose)	564	79,100	1:140
11 (Edmonton excluding CMA)	174	24,171	1:139
12 (Bonnyville)	280	45,100	1:161
13 (Whitecourt)	308	54,400	1:177
14 (Hinton)	97	24,800	1:256
15 (Banff)	179	23,100	1:129
16 (Fort McMurray)	363	48,600	1:134
17 (High Level)	193	49,600	1:257
18 (Grande Cache)	64	13,300	1:208
19 (Grande Prairie)	570	74,300	1:130
Census Metropolitan Area (CMA) of Calgary	6,483	682,782[3]	1:105
Census Metropolitan Area (CMA) of Edmonton	8,165	787,329[3]	1:96
Regional Location Unknown	685	-	-
PROVINCIAL TOTAL	**22,034**	**2,380,200**	**1:108**

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[1] Source: Alberta Association of Registered Nurses. Number of nurses registered with the A.A.R.N. and residing in Alberta as of September 30, 1987. Excludes inactive, honorary, associate, and retired members.

[2] Source: "Estimates of Population and Growth by Alberta Census Divisions", Alberta Bureau of Statistics, May 1988.

[3] Source: Alberta Municipal Affairs and Alberta Bureau of Statistics, October 1987.

TABLE 1B

COMMUNITY BREAKDOWN OF REGISTERED NURSES, ALBERTA, 1987

Community by Population Size	Number Practising[1]	Population[2]	Personnel-to-Population Ratio
Over 60,000			
Census Metropolitan Area (CMA) of Calgary	6,483	682,782[3]	1:105
Census Metropolitan Area (CMA) of Edmonton	8,165	787,329[3]	1:96
Between 10,000 and 60,000			
Camrose	122	12,968	1:106
Fort McMurray	293	34,949	1:119
Grande Prairie	278	26,471	1:95
Lethbridge	681	60,610	1:89
Lloydminster	47	10,201	1:217
Medicine Hat	392	41,804	1:107
Red Deer	728	54,309	1:75
Wetaskiwin	82	10,103	1:123
Between 5,000 and 10,000			
Bonnyville	57	5,575	1:98
Brooks	77	9,464	1:123
Crowsnest Pass	51	6,912	1:136
Drumheller	65	6,366	1:98
Edson	44	7,323	1:166
High River	73	5,096	1:70
Hinton	48	8,629	1:180
Innisfail	76	5,513	1:73
Lacombe	87	6,080	1:70
Okotoks	47	5,522	1:117
Peace River	68	6,355	1:93
Ponoka	147	5,473	1:37
Rocky Mountain House	60	5,261	1:88
Slave Lake	29	5,538	1:191
St. Paul	56	5,128	1:92
Stettler	52	5,147	1:99
Taber	58	6,382	1:110
Vegreville	72	5,276	1:73
Whitecourt	33	5,737	1:174
Under 5,000	2,878	541,897	1:188
Regional Location Unknown	685	-	-
PROVINCIAL TOTAL	**22,034**	**2,380,200[4]**	**1:108**

---

[1] Source: Alberta Association of Registered Nurses. Number of nurses registered with the A.A.R.N. and residing in Alberta as of September 30, 1987. Excludes inactive, honorary, associate, and retired members.

[2] Source: "Official Population List", Municipal Services Branch, Alberta Municipal Affairs, September 1987.

[3] Source: Alberta Municipal Affairs and Alberta Bureau of Statistics, October 1987.

[4] Source: "Alberta Population Growth, Fourth Quarter, 1987", Alberta Bureau of Statistics, March 1988.

TABLE 2

SELECTED MANPOWER STATISTICS FOR REGISTERED NURSES IN ALBERTA, 1985, 1986, AND 1987

	1985	1986	1987
Number of Registered Personnel[1]	20,843	21,596	22,034
% Change in Number of Registered Personnel	3.6%	3.6%	2.0%
Population (Alberta)[2]	2,348,500	2,375,300	2,380,200
% Change in Population	0.4%	1.1%	0.2%
Personnel-to-Population Ratios:			
- Alberta	1:113	1:110	1:108

IV. Educational Programs

In 1986-87, there were 14 basic education programs which met the training requirements for status as a registered nurse. Of these, two were baccalaureate programs, seven were diploma programs offered in community colleges, four were diploma programs offered in hospitals and one was a diploma program for registered psychiatric nurses. These programs produced a total of 882 graduates (743 from the diploma programs and 139 from the baccalaureate programs) in 1986-87. Table 3A lists the basic education programs, including the supplementary program.

In addition, there were 10 post-basic education programs for registered nurses. Of these, five were specialized studies leading to a certificate, three were post-diploma baccalaureate programs and two were master's degree programs. These programs produced a total of 325 graduates in 1986-87. Table 3B lists the post-basic education programs for registered nurses.

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[1] Source: Alberta Association of Registered Nurses. Number of nurses registered with the A.A.R.N. and residing in Alberta as of September 30 of the indicated year. Excludes inactive, honorary, associate, and retired members.

[2] Source: "Alberta Population Growth, Fourth Quarter, 1987", Alberta Bureau of Statistics, March 1988.

TABLE 3A

EDUCATIONAL PROGRAMS FOR REGISTERED NURSES IN ALBERTA[1]

	1984-85	1985-86	1986-87
A. DIPLOMA NURSING PROGRAMS			
Grande Prairie Regional College (Program Length: 88 weeks)			
Enrolments:			
1st Year	25	28	28
2nd Year	22	20	22
Graduates:	22	14	18
Grant MacEwan Community College (Program Length: 88 weeks)			
Enrolments:			
1st Year	92	93	79
2nd Year	45	45	62
Graduates:	47	38	58
Keyano College (Program Length: 88 weeks)			
Enrolments:			
1st Year	34	34	29
2nd Year	13	18	18
Graduates:	13	38	15
Lethbridge Community College (Program Length: 88 weeks)			
Enrolments:			
1st Year	102	102	106
2nd Year	55	59	70
Graduates:	55	49	50
Medicine Hat College (Program Length: 88 weeks)			
Enrolments:			
1st Year	52	44	37
2nd Year	44	34	35
Graduates:	20	27	24

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[1] Source: *Alberta Health and Social Service Education Programs Inventory, 1986-87*. Edmonton, Alberta: Department of Advanced Education, December 1987.

TABLE 3A (continued)

	1984-85	1985-86	1986-87
Mount Royal College (Program Length: 88 weeks)			
Enrolments:			
1st Year	123	126	116
2nd Year	95	95	103
Graduates:	80	72	83
Red Deer College (Program Length: 88 weeks)			
Enrolments:			
1st Year	78	80	80
2nd Year	70	78	80
Graduates:	71	65	71
Foothills Hospital (Program Length: 3 years)			
Enrolments:			
1st Year	152	150	152
2nd Year	121	122	124
3rd Year	106	117	128
Graduates:	104	104	104
Misericordia Hospital (Program Length: 3 years)			
Enrolments:			
1st Year	90	90	90
2nd Year	77	74	83
3rd Year	55	70	67
Graduates:	51	67	62
Royal Alexandra Hospital (Program Length: 3 years)			
Enrolments:			
1st Year	130	123	121
2nd Year	95	121	109
3rd Year	80	85	103
Graduates:	80	87	103

TABLE 3A (continued)

		1984-85	1985-86	1986-87
	University of Alberta Hospitals (Program Length: 2 1/3 years)			
	Enrolments:			
	1st Year	174	181	168
	2nd Year	155	152	162
	3rd Year	153	142	142
	Graduates:	153	140	141
A.	PROVINCIAL TOTAL Number of Diploma Programs: 11			
	Graduates:	696	681	729
B.	**SUPPLEMENTARY NURSING DIPLOMA PROGRAMS (FOR REGISTERED PSYCHIATRIC NURSES)** Grant MacEwan Community College (Program Length: 13 months)			
	Enrolments:			
	1st Year	21	21	19
	Graduates:	10	20	14
A & B	PROVINCIAL TOTAL Total Supplementary plus Basic Diploma Programs: 12			
	Graduates:	706	701	743

TABLE 3A (continued)

		1984-85	1985-86	1986-87
C.	**BACCALAUREATE NURSING PROGRAMS** University of Alberta (Program Length: 4 years)			
	Enrolments:			
	1st Year	107	92	99
	2nd Year	104	98	83
	3rd Year	69	94	85
	4th Year	46	60	95
	Graduates:	46	60	95
	University of Calgary (Program Length: 4 years)			
	Enrolments:			
	1st Year	64	64	64
	2nd Year	56	60	64
	3rd Year	58	50	57
	4th Year	52	52	46
	Graduates:	50	52	44
C.	PROVINCIAL TOTAL Number of Baccalaureate Programs: 2			
	Graduates:	96	112	139
	PROVINCIAL TOTAL Number of Basic Nursing Education Programs: 14			
	Graduates:	802	813	882

TABLE 3B

POST-BASIC EDUCATION PROGRAMS FOR REGISTERED NURSES IN ALBERTA[1]

	1984-85	1985-86	1986-87
A. CERTIFICATE EDUCATION PROGRAMS			
Emergency Intensive Care Certificate[2] Misericordia Hospital School of Nursing (Program Length: 20 weeks)			
Enrolments:			
1st year	-	36	32
Graduates:	-	33	30
Extended Care Nursing Grant MacEwan Community College (Program Length: 1 year)			
Enrolments:			
1st year	215	25	31
Graduates:	26	30	11
Mental Health Nursing Mount Royal College (Program Length: 1 year)			
Enrolments:			
1st year	46	41	50
Graduates:	5	7	3
Neonatal Intensive Care Nursing Education[2] Foothills Hospital School of Nursing (Program Length: variable)			
Enrolments:			
1st year	-	45	29
Graduates:	-	38	24

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[1] Source: *Alberta Health and Social Service Education Programs Inventory, 1986-87*. Edmonton, Alberta: Department of Advanced Education, December 1987.

[2] This program commenced in 1985-86.

TABLE 3B (continued)

	1984-85	1985-86	1986-87
Occupational Health Nursing Grant MacEwan Community College (Program Length: 1 year)			
Enrolments:			
1st year	43	45	27
Graduates:	12	40	31
PROVINCIAL TOTAL Number of Post-Basic Certificate Programs: 5			
Graduates:	43	148	99

TABLE 3B (continued)

		1984-85	1985-86	1986-87
B.	**POST-DIPLOMA BACCALAUREATE EDUCATION PROGRAMS**			
	University of Alberta (Program Length: 2 years)			
	Enrolments:			
	1st Year	141	142	118
	2nd Year	144	172	255
	Graduates:	107	103	118
	University of Calgary (Program Length: 2 years)			
	Enrolments:			
	1st Year	50	50	50
	2nd Year	39	34	35
	Graduates:	52	51	61
	University of Lethbridge (Program Length: 2 years)			
	Enrolments:			
	1st Year	48	64	87
	2nd Year	45	44	28
	Graduates:	27	23	29
	PROVINCIAL TOTAL Number of Baccalaureate Nursing Programs for Diploma Nurses: 3			
	Graduates:	186	177	208

TABLE 3B (continued)

	1984-85	1985-86	1986-87
C. GRADUATE DEGREE EDUCATION PROGRAMS			
Master of Nursing University of Alberta (Program Length: 2 years)			
Enrolments:			
1st Year	15	17	19
2nd Year	25	29	38
Graduates:	4	10	8
University of Calgary (Program Length: 2 years)			
Enrolments:			
1st Year	11	20	26
2nd Year	7	9	17
Graduates:	6	7	10
PROVINCIAL TOTAL Number of Master of Nursing Programs: 2			
Graduates:	10	17	18
PROVINCIAL TOTAL Number of Post-Basic Education Programs: 10			
Graduates:	239	342	325

Refresher Programs:

In 1986-87, eleven institutions (Foothills Hospital, Grant MacEwan Community College, Misericordia Hospital, Lethbridge Community College, Red Deer College, Alberta Vocational Centre - Lac La Biche, Grande Prairie Regional College, Keyano College, Lakeland College, Olds College, and University of Alberta Hospitals) offered refresher courses in nursing for individuals returning to practise or those requiring upgrading of credentials to meet registration requirements. In the 1986-87 academic year, 485 students were enrolled in these programs and 356 graduated.

TABLE 4

PRACTISING NURSES BY SPECIALTY AND PERSONNEL-TO-POPULATION RATIOS BY SPECIALTY, ALBERTA, 1987[1]

Specialty	Number of Practising Nurses	Personnel-to-Population Ratio
Administrative	1,540	1:1,538
Community/Public Health	813	1:2,913
Emergency Room	505	1:4,690
Home Care	514	1:4,608
Intensive Care Units (C.C.U., I.C.U., Burn)	1,118	1:2,119
Intravenous Therapy	54	1:43,864
Labor Delivery/Recovery Suite	346	1:6,846
Long Term Care/Rehabilitation	1,758	1:1,347
Maternal/Child	619	1:3,827
Medical/Surgical	3,774	1:628
Nursing Education	819	1:2,892
Occupational/Staff Health	426	1:5,560
Operating Room	617	1:3,839
Out-Patient Services	215	1:11,017
Paediatrics	480	1:4,935
Physicians' Offices, Medical or School Clinics	534	1:4,436
Psychiatric	591	1:4,008
Recovery Room	165	1:14,355
Short Stay Unit	104	1:22,775
Specialty Total	14,992	1:158
Others	1,605	1:1,653
GRAND TOTAL	**16,597[2]**	**1:153**

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[1] Source: "Health and Social Service Personnel Working in Alberta, March 31, 1987", Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[2] The total number of personnel in Table 4 is less than the total number of personnel in Tables 1A and 1B. This table shows the number of practising personnel as of March 31, 1987, whereas Tables 1A and 1B show the number of nurses who were registered with the Alberta Association of Registered Nurses as of September 30, 1987.

Registered Nursing Assistants

I. Overview

Definition: Provide nursing care for patients in hospitals, nursing homes, clinics and similar establishments. Take and record blood pressure, temperature, pulse and respiration rates. Apply dressings and administer injections, medications and treatments under supervision. Report and record observations and symptoms indicative of change in condition of patients. Assist with admission and discharge of patients. Bathe patients, make beds and assist with rehabilitation procedures. Feed and assist patients in feeding themselves. Answer call-bells and patients' or visitors' inquiries and perform other bedside services. Perform duties in operating room, outpatients and other specialized areas, if required.

(Source: *Canadian Classification and Dictionary of Occupations*. Ottawa, Ontario: Employment and Immigration Canada, 1980)

In 1977, certified nursing aides and registered nursing orderlies were re-named registered nursing assistants in accordance with the Nursing Assistants Registration Act of 1976.

There were 7,414 nursing assistants who resided in Alberta and registered with the Professional Council of Registered Nursing Assistants in 1987.[1] According to a manpower survey conducted by the Alberta Health and Social Services Disciplines Committee, there were 4,038 registered nursing assistants employed as of March 31, 1987.[2] Considering all those who were registered, however, the registered nursing assistant-to-population ratio was 1:321 in Alberta in 1987.

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[1] Source: Professional Council of Registered Nursing Assistants (P.C.R.N.A.). Number of nursing assistants registered with the P.C.R.N.A. and residing in Alberta as of December 31, 1987.

[2] Source: "Health and Social Service Personnel Working in Alberta, March 31, 1987", Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

II. Professional Association and Legislation Information

a) Licensing, Registration, or Certification Authority:

Professional Council of Registered Nursing Assistants
10614 - 170 Street
Edmonton, Alberta
T5S 1P3

Executive Director/Registrar: Ms. Pat Fredrickson
President: Ms. Marie Cornelson

b) Legislation:

Since January 1, 1987, nursing assistants have been regulated under the Health Disciplines Act. Under this Act, the Professional Council of Registered Nursing Assistants is designated as the body responsible for registration and professional conduct of its members. The Health Disciplines Board is responsible for setting educational qualifications for registration purposes. Under the authority of the Health Disciplines Act, all individuals who wish to use the title of "registered nursing assistant" or "registered nursing orderly" must register with the Council.

III. Personnel Data

Data on the geographic and community breakdown of registered nursing assistants (for Tables 1A and 1B) was unavailable for 1987.

TABLE 2

SELECTED MANPOWER STATISTICS FOR REGISTERED NURSING ASISTANTS IN ALBERTA, 1985, 1986, AND 1987

	1985	1986	1987
Number of Registered Personnel	7,643[1]	7,864[1]	7,414[2]
% Change in Number of Registered Personnel	1.9%	2.9%	N/A[3]
Population (Alberta)[4]	2,348,500	2,375,300	2,380,200
% Change in Population	0.4%	1.1%	0.2%
Personnel-to-Population Ratios:			
- Alberta	1:307	1:302	1:321

IV. Educational Programs

The Alberta Vocational Centres (AVC) in Calgary, Edmonton, and Grouard each offer a nursing assistant certificate program which is approximately 10 months in length. The Calgary program includes off-campus instruction at Crowsnest Pass, Drumheller and Claresholm. In 1986-87, there were 265 graduates from these programs.

A six-month nursing assistant refresher program is offered at both AVC Calgary and AVC Edmonton. There were 39 graduates in 1986-87 from the two programs.

In addition to the basic and refresher programs, a post-basic course "Administration of Oral Medications" is being offered through AVC Edmonton. This is a distance delivery course of 9 to 11 weeks in length designed as part-time study for individuals who are presently employed. This course was offered as a pilot project in 1986. Fifteen nursing assistants received certification at its conclusion. In 1987, 37 students were registered in the course; 34 students graduated.

Another specialist course, "Working with the Aged" is being planned to commence in September 1988.

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[1] Source: Alberta Nursing Assistants Registration Board. Number of nursing assistants registered with the Board and residing in Alberta as of December 31 of the indicated year.

[2] Source: Professional Council of Registered Nursing Assistants (P.C.R.N.A.). Number of nursing assistants registered with the P.C.R.N.A. and residing in Alberta as of December 31, 1987.

[3] Since the source of personnel information for 1987 is different from the source for 1986, the data are not comparable.

[4] Source: "Alberta Population Growth, Fourth Quarter, 1987", Alberta Bureau of Statistics, March 1988.

TABLE 3

EDUCATIONAL PROGRAMS FOR NURSING ASSISTANTS IN ALBERTA[1]

	1984-85	1985-86	1986-87
Alberta Vocational Centre - Calgary[2] (Program Length: 38 weeks)			
Enrolments:	208	196	166
Graduates:	151	122	111
Alberta Vocational Centre - Edmonton (Program Length: 38 weeks)			
Enrolments:	191	180	176
Graduates:	131	125	135
Alberta Vocational Centre - Grouard[3] (Program Length: 1 year)			
Enrolments:	20	27	24
Graduates:	14	17	19
PROVINCIAL TOTAL Number of Certificate Programs: 3			
Graduates:	296	264	265

---

[1] Source: *Alberta Health and Social Service Education Programs Inventory, 1986-87*. Edmonton, Alberta: Department of Advanced Education, December 1987.

[2] This program is also offered at the Chinook and Big Country Educational Consortia.

[3] This program is brokered from Alberta Vocational Centre, Edmonton.

Rehabilitation Practitioners

I. Overview

Definition: Rehabilitation practitioners work in the provision of rehabilitation programs to the developmentally handicapped in a community or institutional setting. These workers are normally responsible for the delivery of established care and developmental programs based on client's needs in the areas of residence, family support, vocation, social education, recreation/leisure or developmental day care.

(Source: Government of Alberta)

Since registration with the Alberta Association of Rehabilitation Practitioners is not mandatory, the survey of health and social service person nel working in Alberta, conducted on March 31, 1987 by the Alberta Health and Social Services Disciplines Committee, was used as an alternative source of manpower information.

There were 1,548 rehabilitation practitioners practising in Alberta in 1987.[1] Rehabilitation practitioners employed in the Census Metropolitan Areas of Calgary and Edmonton accounted for 51 percent of the total. Another 20 percent were located in Census Division 8 (Red Deer) where Michener Centre, the province's largest institution for the developmentally handicapped, is located. The provincial rehabilitation practitioner-to-population ratio was 1:1,538 in 1987.

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[1] Source: "Health and Social Service Personnel Working in Alberta, March 31, 1987", Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

II. Professional Association and Legislation Information

a) Licensing, Registration, or Certification Authority:

None.

b) Professional Association:

Alberta Association of Rehabilitation Practitioners
P.O. Box 887
Red Deer, Alberta
T4N 1K3

President: Ms. Linda McKay

c) Legislation:

Rehabilitation practitioners have been designated to be regulated under the Health Disciplines Act; a Rehabilitation Practitioners Committee was established under this Act. Currently the government is re-evaluating the need to regulate this discipline.

III. Personnel Data

TABLE 1A

GEOGRAPHIC DISTRIBUTION OF PRACTISING REHABILITATION PRACTITIONERS, ALBERTA, 1987

Census Division (Major Urban Centre)	Number Practising[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	47	56,700	1:1,206
2 (Lethbridge)	77	115,000	1:1,494
3 (Pincher Creek)	1	34,400	1:34,400
4 (Hanna)	1	12,000	1:12,000
5 (Drumheller)	23	38,100	1:1,657
6 (Calgary excluding CMA)	18	42,618	1:2,368
7 (Stettler)	6	40,400	1:6,733
8 (Red Deer)	310	118,400	1:382
9 (Rocky Mountain House)	7	16,000	1:2,286
10 (Camrose)	64	79,100	1:1,236
11 (Edmonton excluding CMA)	4	24,171	1:6,043
12 (Bonnyville)	11	45,100	1:4,100
13 (Whitecourt)	9	54,400	1:6,044
14 (Hinton)	9	24,800	1:2,756
15 (Banff)	11	23,100	1:2,100
16 (Fort McMurray)	2	48,600	1:24,300
17 (High Level)	6	49,600	1:8,267
18 (Grande Cache)	0	13,300	-
19 (Grande Prairie)	153	74,300	1:486
Census Metropolitan Area (CMA) of Calgary	367	682,782[3]	1:1,860
Census Metropolitan Area (CMA) of Edmonton	422	787,329[3]	1:1,866
PROVINCIAL TOTAL	**1,548**	**2,380,200**	**1:1,538**

---

[1] Source: "Health and Social Service Personnel Working in Alberta, March 31, 1987", Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[2] Source: "Estimates of Population and Growth by Alberta Census Divisions", Alberta Bureau of Statistics, May 1988.

[3] Source: Alberta Municipal Affairs and Alberta Bureau of Statistics, October 1987.

TABLE 1B

COMMUNITY BREAKDOWN OF PRACTISING REHABILITATION PRACTITIONERS, ALBERTA, 1987

Community by Population Size	Number Practising[1]	Population[2]	Personnel-to-Population Ratio
Over 60,000			
Census Metropolitan Area (CMA) of Calgary	367	682,782[3]	1:1,860
Census Metropolitan Area (CMA) of Edmonton	422	787,329[3]	1:1,866
Between 10,000 and 60,000			
Camros	24	12,968	1:540
Fort McMurray	2	34,949	1:17,475
Grande Prairie	114	26,471	1:232
Lethbridge	76	60,610	1:798
Lloydminster	10	10,201	1:1,020
Medicine Hat	47	41,804	1:889
Red Deer	296	54,309	1:183
Wetaskiwin	4	10,103	1:2,526
Between 5,000 and 10,000			
Bonnyville	11	5,575	1:507
Brooks	0	9,464	-
Crowsnest Pass	11	6,912	1:628
Drumheller	23	6,366	1:277
Edson	9	7,323	1:814
High River	0	5,096	-
Hinton	0	8,629	-
Innisfail	6	5,513	1:919
Lacombe	6	6,080	1:1,013
Okotoks	0	5,522	-
Peace River	32	6,355	1:199
Ponoka	2	5,473	1:2,737
Rocky Mountain House	7	5,261	1:752
Slave Lake	0	5,538	-
St. Paul	0	5,128	-
Stettler	0	5,147	-
Taber	0	6,382	-
Vegreville	25	5,276	1:211
Whitecourt	0	5,737	-
Under 5,000	54	541,897	1:10,035
PROVINCIAL TOTAL	**1,548**	**2,380,200[4]**	**1:1,538**

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[1] Source: "Health and Social Service Personnel Working in Alberta, March 31, 1987", Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[2] Source: "Official Population List", Municipal Services Branch, Alberta Municipal Affairs, September 1987.

[3] Source: Alberta Municipal Affairs and Alberta Bureau of Statistics, October 1987.

[4] Source: "Alberta Population Growth, Fourth Quarter, 1987", Alberta Bureau of Statistics, March 1988.

TABLE 2

SELECTED MANPOWER STATISTICS FOR REHABILITATION PRACTITIONERS IN ALBERTA, 1985, 1986, AND 1987

	1985	1986	1987
Number of Practising Personnel[1]	1,212	1,223	1,548
% Change in Number of Practising Personnel	-1.1%	0.9%	26.6%
Population (Alberta)[2]	2,348,500	2,375,300	2,380,200
% Change in Population	0.4%	1.1%	0.2%
Personnel-to-Population Ratios - Alberta	1:1,938	1:1,942	1:1,538

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[1] Source: "Health and Social Service Personnel Working in Alberta", March 31, 1985, 1986, 1987, Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[2] Source: "Alberta Population Growth, Fourth Quarter, 1987", Alberta Bureau of Statistics, March 1988.

IV. Educational Programs

Training in rehabilitative services is offered in one-year certificate programs, two-year diploma programs, and a four-year baccalaureate program. The diploma programs are offered at Grant MacEwan Community College, Lethbridge Community College, Mount Royal College and Red Deer College; the baccalaureate program is offered at the University of Calgary. Alberta Vocational Centre - Lac La Biche, Grande Prairie Regional College and Medicine Hat College offer certificate programs of approximately one year in length.

TABLE 3

EDUCATIONAL PROGRAMS FOR REHABILITATION PRACTITIONERS IN ALBERTA[1]

	1984-85	1985-86	1986-87
A. CERTIFICATE PROGRAMS IN REHABILITATIVE SERVICES			
Alberta Vocational Centre -Lac La Biche (Program Length: 36 weeks)			
Enrolments:			
1st Year	11	12	12
Graduates:	8	9	8
Grande Prairie Regional College (Program Length: 44 weeks)			
Enrolments:[2]			
1st Year	-	-	19
Graduates:	-	-	7
Medicine Hat College (Program Length: 1 year)			
Enrolments:[3]			
1st Year	-	30	32
Graduates:	-	7	11

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[1] Source: *Alberta Health and Social Service Education Programs Inventory, 1986-87*. Edmonton, Alberta: Department of Advanced Education, December 1987.

[2] This program commenced in 1986-87 with temporary funding.

[3] This program commenced in 1985-86 with temporary funding for three years.

TABLE 3 (continued)

	1984-85	1985-86	1986-87
B. DIPLOMA PROGRAMS IN REHABILITATIVE SERVICES			
Grant MacEwan Community College (Program Length: 2 years)			
Enrolments:			
1st Year	220	147	37
2nd Year	52	50	39
Graduates:	40	48	39
Lethbridge Community College (Program Length: 2 years)			
Enrolments:			
1st Year	39	36	32
2nd Year	21	21	28
Graduates:	15	16	13
Mount Royal Community College (Program Length: 2 years)			
Enrolments:			
1st Year	76	72	64
2nd Year	47	48	50
Graduates:	29	37	39
Red Deer College (Program Length: 2 years)			
Enrolments:			
1st Year	51	52	49
2nd Year	57	44	35
Graduates:	55	36	29

TABLE 3 (continued)

	1984-85	1985-86	1986-87
C. **BACCALAUREATE PROGRAM IN REHABILITATION EDUCATION** University of Calgary (Program Length: 4 years)			
Enrolments:			
1st Year	-	4	6
2nd, 3rd and 4th Years Combined	-	-	-
Graduates:	-	1	1
PROVINCIAL TOTAL Number of Certificate Training Programs: 3			
Graduates:	12	16	26
Number of Diploma Training Programs: 4			
Graduates:	139	137	120
Number of Baccalaureate Training Programs: 1			
Graduates:	-	1	1

Respiratory Therapists

I. Overview

Definition: Administer respiratory therapy to patients in hospital or at home. Discuss patient's treatment with medical and nursing staff. Set up ventilators, incubators, manual resuscitators and other life support equipment. Attach life support equipment to patient. Operate controls of equipment to adjust airway pressure, humidity, blood gas levels, respiratory rate and other factors. Monitor patient's progress and equipment function. Perform basic pulmonary function tests to assist physician in diagnosis of respiratory illnesses. Take blood sample from patient and analyze for blood gas values, if required. Explain treatment procedures and demonstrate equipment operation to patients and hospital personnel. Perform artificial respiration and external cardiac massage, if required. Service and repair equipment and inspect all medical piping, manifolds and patient alarm system.

(Source: *Canadian Classification and Dictionary of Occupations*. Ottawa Ontario: Employment and Immigration Canada, 1980)

Respiratory therapists have been regulated under the Health Disciplines Act since 1986. Registration data obtained from the Respiratory Therapists Committee under the Health Disciplines Board is now used for for information on manpower supply. Previously, data from the Alberta Health and Social Services Disciplines Committee's survey of employers was used. Data from 1986 cannot be compared to data from previous years because of this change.

There were 457 respiratory therapists registered with the Respiratory Therapists Committee in 1987. Respiratory therapists in the Census Metropolitan Areas of Calgary and Edmonton accounted for 82 percent of the total. The provincial personnel-to-population ratio was 1:5,208.

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[1] Source: Respiratory Therapists Committee.

II. Professional Association and Legislation Information

a) Licensing, Registration, or Certification Authority:

Respiratory Therapists Committee
Professions and Occupations Bureau
9th Floor, John E. Brownlee Building
10365 - 97 Street
Edmonton, Alberta
T5J 3W7

Chairman: Ms. Mary Rehill

b) Professional Association:

Alberta Society of Respiratory Therapists
907 - 18 Avenue, N.W.
Calgary, Alberta
T2M 0V6

President: Mr. Brian Buell

c) Legislation:

Respiratory therapists have been regulated under the Health Disciplines Act since March 31, 1986. The Respiratory Therapists Committee and the Health Disciplines Board are responsible for registration and discipline of practitioners. Educational qualifications have been set by the Board in regulation.

The titles "registered respiratory therapist" and "registered respiratory technologist" are reserved by regulation for registered members.

III. Personnel Data

TABLE 1

GEOGRAPHIC DISTRIBUTION OF REGISTERED RESPIRATORY THERAPISTS, ALBERTA, 1987

Census Division (Major Urban Centre)	Number Practising[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	7	56,700	1:8,100
2 (Lethbridge)	17	115,000	1:6,765
3 (Pincher Creek)	1	34,400	1:34,400
4 (Hanna)	0	12,000	-
5 (Drumheller)	1	38,100	1:38,100
6 (Calgary excluding CMA)	4	42,618	1:10,655
7 (Stettler)	0	40,400	-
8 (Red Deer)	25	118,400	1:4,736
9 (Rocky Mountain House)	1	16,000	1:16,000
10 (Camrose)	6	79,100	1:13,183
11 (Edmonton excluding CMA)	0	24,171	-
12 (Bonnyville)	2	45,100	1:22,550
13 (Whitecourt)	5	54,400	1:10,880
14 (Hinton)	0	24,800	-
15 (Banff)	1	23,100	1:23,100
16 (Fort McMurray)	4	48,600	1:12,150
17 (High Level)	0	49,600	-
18 (Grande Cache)	0	13,300	-
19 (Grande Prairie)	6	74,300	1:12,383
Census Metropolitan Area (CMA) of Calgary	153	682,782[3]	1:4,463
Census Metropolitan Area (CMA) of Edmonton	222	787,329[3]	1:3,547
Regional Location Unknown	2		
PROVINCIAL TOTAL	**457**	**2,380,200**	**1:5,208**

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[1] Source: Respiratory Therapists Committee.

[2] Source: "Estimates of Population and Growth by Alberta Census Divisions", Alberta Bureau of Statistics, May 1988.

[3] Source: Alberta Municipal Affairs and Alberta Bureau of Statistics, October 1987.

TABLE 2

SELECTED MANPOWER STATISTICS FOR RESPIRATORY THERAPISTS IN ALBERTA, 1985, 1986, AND 1987

	1985	1986	1987
Number of Practising or Registered Personnel	269[1]	397[2]	457[2]
% Change in Number of Practising or Registered Personnel	N/A	N/A	15.1%
Population (Alberta)[3]	2,348,500	2,375,300	2,380,200
% Change in Population	0.4%	1.1%	0.2%
Personnel-to-Population Ratios - Alberta	1:8,730	1:5,983	1:5,208

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[1] Source: "Health and Social Service Personnel Working in Alberta, March 31, 1985", Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[2] Source: Respiratory Therapists Committee. Note: Since the source for the 1986 (and 1987) data is different from the source for the 1985 data, the data for 1986 and 1985 are not comparable.

[3] Source: "Alberta Population Growth, Fourth Quarter, 1987", Alberta Bureau of Statistics, March 1988.

IV. Educational Programs

The Northern Alberta Institute of Technology and the Southern Alberta Institute of Technology each offer a two-year respiratory technology diploma program. There were 51 graduates from the two programs in 1986-87.

TABLE 3

EDUCATIONAL PROGRAMS FOR RESPIRATORY THERAPISTS IN ALBERTA[1]

	1984-85	1985-86	1986-87
Northern Alberta Institute of Technology (Program Length: 2 years)			
Enrolments:			
1st Year	45	43	43
2nd Year	30	32	32
Graduates:	29	30	30
Southern Alberta Institute of Technology (Program Length: 2 years)			
Enrolments:			
1st Year	29	27	29
2nd Year	25	27	27
Graduates:	24	19	21
PROVINCIAL TOTAL Number of Training Programs: 2			
Graduates:	53	49	51

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[1] Source: ***Alberta Health and Social Service Education Programs Inventory, 1986-87***. Edmonton, Alberta: Department of Advanced Education, December 1987.

Social Workers

I. Overview

Definition: Counsel and aid individuals and families to understand and resolve their personal and social problems. Interview clients with problems, such as personal, social and family adjustments, finances, employment, and physical and mental impairments, to determine nature, extent and causes of problems. Secure information, such as social, economic, environmental, medical and psychological factors, contributing to client's situation. Evaluate information obtained and assess client's capacities. Determine type of assistance required, counsel client regarding plans for meeting needs, and assist client to mobilize his inner capacities and environmental resources to improve social functioning. Aid client, through casework methods, to modify attitudes and patterns of behaviour by increasing understanding of himself, his problems and his part in creating them. Refer client to community agencies and other organizations and arrange for provision of appropriate assistance, such as financial aid, employment, vocational training, medical treatment, recreational opportunities or housing. Follow progress of client after immediate problems have been overcome, and compile case records and prepare reports. May secure supplementary information such as employment, police or medical records, or school reports. May work in collaboration with professionals in other disciplines.

(Source: *Canadian Classification and Dictionary of Occupations*. Ottawa, Ontario: Employment and Immigration Canada, 1980)

Since registration with the Alberta Association of Social Workers (A.A.S.W.) is not mandatory, the survey of health and social service personnel working in Alberta, conducted on March 31, 1987 by the Alberta Health and Social Services Disciplines Committee, was used as an alterna tive source of manpower information.

There were 2,443 social workers practising in Alberta in 1987.[1] Social workers employed in the Census Metropolitan Areas of Calgary and Edmonton accounted for 66 percent of those employed. The provincial social worker-to-population ratio was 1:974 in 1987.

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[1] Source: "Health and Social Service Personnel Working in Alberta, March 31, 1987", Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

II. Professional Association and Legislation Information

a) Professional Association/Registration Body:

Alberta Association of Social Workers
#100, 11831 - 123 Street
Edmonton, Alberta
T5L 0G7

President: Ms. Margaret Dewhurst

b) Legislation:

Under the authority of the Social Workers Act, all individuals who wish to use the title of "registered social worker" must register with the Alberta Association of Social Workers (A.A.S.W.). However, registration is not mandatory in order to practise in the province. In addition to registration responsibilities, the Association has the power to discipline its members. The Universities Coordinating Council evaluates academic qualifications of applicants and sets examinations for registration purposes.

III. Personnel Data

TABLE 1A

GEOGRAPHIC DISTRIBUTION OF PRACTISING SOCIAL WORKERS, ALBERTA, 1987

Census Division (Major Urban Centre)	Number Practising[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	39	56,700	1:1,454
2 (Lethbridge)	130	115,000	1:885
3 (Pincher Creek)	10	34,400	1:3,440
4 (Hanna)	2	12,000	1:6,000
5 (Drumheller)	18	38,100	1:2,117
6 (Calgary excluding CMA)	12	42,618	1:3,552
7 (Stettler)	16	40,400	1:2,525
8 (Red Deer)	142	118,400	1:834
9 (Rocky Mountain House)	22	16,000	1:727
10 (Camrose)	49	79,100	1:1,614
11 (Edmonton excluding CMA)	21	24,171	1:1,151
12 (Bonnyville)	46	45,100	1:980
13 (Whitecourt)	45	54,400	1:1,209
14 (Hinton)	23	24,800	1:1,078
15 (Banff)	14	23,100	1:1,650
16 (Fort McMurray)	59	48,600	1:824
17 (High Level)	81	49,600	1:612
18 (Grande Cache)	3	13,300	1:4,433
19 (Grande Prairie)	99	74,300	1:751
Census Metropolitan Area (CMA) of Calgary	727	682,782[3]	1:939
Census Metropolitan Area (CMA) of Edmonton	885	787,329[3]	1:890
PROVINCIAL TOTAL	**2,443**	**2,380,200**	**1:974**

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[1] Source: "Health and Social Service Personnel Working in Alberta, March 31, 1987", Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[2] Source: "Estimates of Population and Growth by Alberta Census Divisions", Alberta Bureau of Statistics, May 1988.

[3] Source: Alberta Municipal Affairs and Alberta Bureau of Statistics, October 1987.

TABLE 1B

COMMUNITY BREAKDOWN OF PRACTISING SOCIAL WORKERS, ALBERTA, 1987

Community by Population Size	Number Practising[1]	Population[2]	Personnel-to-Population Ratio
Over 60,000			
Census Metropolitan Area (CMA) of Calgary	727	682,782[3]	1:939
Census Metropolitan Area (CMA) of Edmonton	885	787,329[3]	1:890
Between 10,000 and 60,000			
Camrose	19	12,968	1:683
Fort McMurray	24	34,949	1:1,456
Grande Prairie	75	26,471	1:353
Lethbridge	110	60,610	1:551
Lloydminster	8	10,201	1:1,275
Medicine Hat	39	41,804	1:1,072
Red Deer	96	54,309	1:566
Wetaskiwin	21	10,103	1:481
Between 5,000 and 10,000			
Bonnyville	16	5,575	1:348
Brooks	8	9,464	1:1,183
Crowsnest Pass	6	6,912	1:1,152
Drumheller	8	6,366	1:796
Edson	10	7,323	1:732
High River	2	5,096	1:2,548
Hinton	13	8,629	1:664
Innisfail	15	5,513	1:368
Lacombe	7	6,080	1:869
Okotoks	0	5,522	-
Peace River	22	6,355	1:289
Ponoka	18	5,473	1:304
Rocky Mountain House	22	5,261	1:239
Slave Lake	23	5,538	1:241
St. Paul	22	5,128	1:233
Stettler	5	5,147	1:1,029
Taber	8	6,382	1:798
Vegreville	16	5,276	1:330
Whitecourt	15	5,737	1:382
Under 5,000	203	541,897	1:2,669
PROVINCIAL TOTAL	**2,443**	**2,380,200[4]**	**1:974**

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[1] Source: "Health and Social Service Personnel Working in Alberta, March 31, 1987", Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[2] Source: "Official Population List", Municipal Services Branch, Alberta Municipal Affairs, September 1987.

[3] Source: Alberta Municipal Affairs and Alberta Bureau of Statistics, October 1987.

[4] Source: "Alberta Population Growth, Fourth Quarter, 1987", Alberta Bureau of Statistics, March 1988.

TABLE 2

SELECTED MANPOWER STATISTICS FOR SOCIAL WORKERS IN ALBERTA, 1985, 1986, AND 1987

	1985	1986	1987
Number of Practising Personnel[1]	2,290	2,154	2,443
% Change in Number of Practising Personnel	8.3%	-5.9%	13.4%
Population (Alberta)[2]	2,348,500	2,375,300	2,380,200
% Change in Population	0.4%	1.1%	0.2%
Personnel-to-Population Ratios:			
- Alberta	1:1,026	1:1,103	1:974

IV. Educational Programs

The University of Calgary offers both a four-year Bachelor of Social Work (B.S.W.) program and an 18-month Master of Social Work (M.S.W.) program. In 1986-87, the B.S.W. and M.S.W. programs produced 144 and 49 graduates respectively.

Divisions of the Faculty of Social Welfare of the University of Calgary are located in Edmonton and in Lethbridge. Both the Edmonton and Lethbridge Divisions offer the full first professional degree (Bachelor of Social Work). Social work courses are offered in various locations throughout the province, either through on-site faculty instruction or through the University of Calgary teleconferencing network.

In addition there are diploma programs in social services available at Grant MacEwan Community College, Mount Royal College, and Red Deer College. These programs produced a total of 169 graduates in 1986-87. There is also a community social service diploma offered by Alberta Vocational Centre - Lac La Biche. This program produced 18 graduates in 1986-87.

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[1] Source: "Health and Social Service Personnel Working in Alberta", March 31, 1985, 1986, 1987, Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[2] Source: "Alberta Population Growth, Fourth Quarter, 1987", Alberta Bureau of Statistics, March 1988.

TABLE 3

EDUCATIONAL PROGRAMS FOR SOCIAL WORKERS IN ALBERTA[1]

	1984-85	1985-86	1986-87
A. SOCIAL SERVICE DIPLOMA PROGRAMS			
Grant MacEwan Community College (Program Length: 2 years)			
Enrolments:[2]			
1st Year	129	140	145
2nd Year	78	95	114
Graduates:	41	63	82
Mount Royal College (Program Length: 2 years)			
Enrolments:			
1st Year	137	122	145
2nd Year	67	63	81
Graduates:	58	60	65
Red Deer College (Program Length: 2 years)			
Enrolments:			
1st Year	25	40	30
2nd Year	24	24	22
Graduates:	22	24	22
B. COMMUNITY SOCIAL SERVICE DIPLOMA			
Alberta Vocational Centre - Lac La Biche (Program Length: 2 years)			
Enrolments:[3]			
1st Year	15	36	18
2nd Year	-	11	9
Graduates:	11	28	18

TABLE 3 (continued)

		1984-85	1985-86	1986-87
	PROVINCIAL TOTAL Number of Diploma Training Programs: 4			
	Graduates:	132	180	187
C.	**BACCALAUREATE PROGRAM** University of Calgary Bachelor of Social Work (Program Length: 4 years)			
	Enrolments:[4]			
	1st Year	11	9	14
	2nd Year	71	76	68
	3rd Year	228	193	207
	4th Year	161	154	152
	Graduates:	149	158	144
D.	**MASTER'S PROGRAM** University of Calgary Master of Social Work (Program Length: 18 months)[5]			
	Enrolments:			
	1st Year	45	59	44
	Graduates:	37	31	49

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[1] Source: *Alberta Health and Social Service Education Programs Inventory, 1986-87*. Edmonton, Alberta: Department of Advanced Education, December 1987.

[2] Figures include part-time evening and full-time outreach data from Blue Quills, Grouard and the Yellowhead Tribal Council Program.

[3] As of 1985-86, enrolment data includes figures for the Slave Lake outreach program.

[4] The Faculty of Social Welfare admits students from other faculties into the third year of the B.S.W. program. This accounts for the discrepency between the enrolment figures for the second year and the third year of the program.

[5] The M.S.W. program is one year in length following a B.S.W. degree. Students with an undergraduate degree other than a B.S.W. degree may be admitted to a two-year program.